

OPERATION AND PARTS MANUAL



MULTIQUIP®

GloBug SERIES

MODELS:

GB12BW

SERIAL NO. G2700001 AND ABOVE

GB12BS

SERIAL NO. G2800001 AND ABOVE

GB12BP

SERIAL NO. G2900001 AND ABOVE

Revision #0 (06/24/13)



To find the latest revision of this publication, visit our website at:
www.multiquip.com



THIS MANUAL MUST ACCOMPANY THE EQUIPMENT AT ALL TIMES.

[illegible]

Certificate



Certificate no.

CA 72131710 01

License Holder:

LIGHT BOY CO., LTD.
2-6-14 Kurigi, Asao
KAWASAKI, KANAGAWA 215-0033
JAPAN

Manufacturing Plant:

LIGHT BOY CO., LTD.
2-6-14 Kurigi, Asao
KAWASAKI, KANAGAWA 215-0033
JAPAN

Test report no.: USA-SS 17032848 001

Client Reference: Satomi Kugimiya

Tested to: CAN/CSA-C22.2 No. 9.0-96 (R2011)
CAN/CSA-C22.2 No. 74-96+GI1 (R2010)

Certified Product: Portable HID luminaire, Globug Series

License Fee - Units

Model Designation: 1) GB12BW, GB12BS, GB12BP,
2) GBW, GBS, GBC, GBP

7

Rated Voltage: AC 120V, 60Hz
Rated Power: 1) 430W 2) 1030W

Appendix: 1, 1-9

7

Licensed Test mark:



Date of Issue

(day/mo/yr)

07/06/2013

TUV Rheinland of North America, Inc., 12 Commerce Road, Newtown, CT 06470, Tel (203) 426-0888 Fax (203) 426-4009

TABLE OF CONTENTS

GB12BW/BS/BP Lighting System

Table Of Contents	4
Parts Ordering Procedures.....	5
Safety Information	6-9
Specifications	10
Dimensions (GB12BW)	11
Dimensions (GB12BS)	12
Dimensions (GB12BP)	13
Footcandle Plot.....	14
General Information.....	15
Components	16-17
Setup (GB12BW).....	18-20
Operation (GB12BW)	21-23
Setup (GB12BS).....	24-25
Operation (GB12BS)	26
Maintenance	27-31
Wiring Diagram.....	32
Troubleshooting	33
Explanation Of Code In Remarks Column.....	34
Suggested Spare Parts	35

Component Drawings

Nameplate And Decals (GB12BW)	36-37
Nameplate And Decals (GB12BS)	38-39
Nameplate And Decals (GB12BP)	40-41
Mast/Tripod Assy.....	42-43
Fan Blower/Lamp Assy.	44-45
Balloon/Lamp Guard Assy.	46-47
Offset Pole Assy. (GB12BS)	48-49

Terms And Conditions Of Sale — Parts	50
--	----

NOTICE

Specifications and part numbers are subject to change without notice.

PARTS ORDERING PROCEDURES

Ordering parts has never been easier! Choose from three easy options:

Effective:
January 1st, 2006



Order via Internet (Dealers Only):

Order parts on-line using Multiquip's SmartEquip website!

- View Parts Diagrams
- Order Parts
- Print Specification Information



If you have an MQ Account, to obtain a Username and Password, E-mail us at: **parts@multiquip.com**.

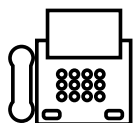
To obtain an MQ Account, contact your District Sales Manager for more information.

Goto www.multiquip.com and click on

Order Parts to log in and save!

Use the **internet** and qualify for a **5% Discount** on *Standard orders* for all orders which include complete part numbers.*

Note: Discounts Are Subject To Change



Order via Fax (Dealers Only):

All customers are welcome to order parts via Fax.

Domestic (US) Customers dial:

1-800-6-PARTS-7 (800-672-7877)

Fax your order in and qualify for a **2% Discount** on *Standard orders* for all orders which include complete part numbers.*

Note: Discounts Are Subject To Change



Order via Phone: Domestic (US) Dealers Call:
1-800-427-1244

Non-Dealer Customers:

Contact your local Multiquip Dealer for parts or call 800-427-1244 for help in locating a dealer near you.



International Customers should contact their local Multiquip Representatives for Parts Ordering information.

When ordering parts, please supply:

- ☐ Dealer Account Number
- ☐ Dealer Name and Address
- ☐ Shipping Address (if different than billing address)
- ☐ Return Fax Number
- ☐ Applicable Model Number
- ☐ Quantity, Part Number and Description of Each Part

☐ Specify Preferred Method of Shipment:

- ☒ UPS/Fed Ex
- ☒ Priority One
- ☒ Ground
- ☒ Next Day
- ☒ Second/Third Day
- ☒ DHL
- ☒ Truck

NOTICE

All orders are treated as *Standard Orders* and will ship the same day if received prior to 3PM PST.

WE ACCEPT ALL MAJOR CREDIT CARDS!



www.multiquip.com



SAFETY INFORMATION

Do not operate or service the equipment before reading the entire manual. Safety precautions should be followed at all times when operating this equipment. Failure to read and understand the safety messages and operating instructions could result in injury to yourself and others.



SAFETY MESSAGES

The four safety messages shown below will inform you about potential hazards that could injure you or others. The safety messages specifically address the level of exposure to the operator and are preceded by one of four words: **DANGER**, **WARNING**, **CAUTION** or **NOTICE**.

SAFETY SYMBOLS



DANGER

Indicates a hazardous situation which, if not avoided, **WILL** result in **DEATH** or **SERIOUS INJURY**.



WARNING

Indicates a hazardous situation which, if not avoided, **COULD** result in **DEATH** or **SERIOUS INJURY**.



CAUTION

Indicates a hazardous situation which, if not avoided, **COULD** result in **MINOR** or **MODERATE INJURY**.

NOTICE

Addresses practices not related to personal injury.

Potential hazards associated with the operation of this equipment will be referenced with hazard symbols which may appear throughout this manual in conjunction with safety messages.

Symbol	Safety Hazard
A black silhouette of a hand reaching towards a series of wavy lines representing flames.	Burn hazards
A black silhouette of a person with a lightning bolt symbol striking their torso.	Electric shock hazards

SAFETY INFORMATION

GENERAL SAFETY

⚠ CAUTION

- **NEVER** operate this equipment without proper protective clothing, shatterproof glasses, respiratory protection, hearing protection, steel-toed boots and other protective devices required by the job or city and state regulations.



- **NEVER** operate this equipment when not feeling well due to fatigue, illness or when under medication.



- **NEVER** operate this equipment under the influence of drugs or alcohol.



- **ALWAYS** check the equipment for loosened threads or bolts before starting.

- **DO NOT** use the equipment for any purpose other than its intended purposes or applications.

NOTICE

- This equipment should only be operated by trained and qualified personnel 18 years of age and older.
- Whenever necessary, replace nameplate, operation and safety decals when they become difficult read.
- Manufacturer does not assume responsibility for any accident due to equipment modifications. Unauthorized equipment modification will void all warranties.
- **NEVER** use accessories or attachments that are not recommended by Multiquip for this equipment. Damage to the equipment and/or injury to user may result.

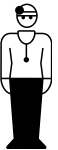
- **ALWAYS** know the location of the nearest fire extinguisher.



- **ALWAYS** know the location of the nearest first aid kit.



- **ALWAYS** know the location of the nearest phone or **keep a phone on the job site**. Also, know the phone numbers of the nearest **ambulance**, **doctor** and **fire department**. This information will be invaluable in the case of an emergency.



SAFETY INFORMATION

LIGHTING SYSTEM SAFETY

WARNING

- **NEVER** disconnect any **emergency or safety devices**. These devices are intended for operator safety. Disconnection of these devices can cause **severe injury, bodily harm or even death**. Disconnection of any of these devices will void all warranties.

CAUTION

- **NEVER** attempt service on a running machine.

NOTICE

- To prevent the lighting system from overturning, **NEVER** use in winds that exceed 22 mph (10 m/s).
- The lighting system should only be used in temperatures between 23° to 104°F (-5° to 40° C). Failure to comply with these operating parameters could cause the lamp to malfunction and shorten the ballast life.
- **ALWAYS** keep the lighting system in proper running condition.
- Fix damage to lighting system and replace any broken parts immediately.
- **ALWAYS** store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children and unauthorized personnel.

LAMP SAFETY

WARNING

- **NEVER** attempt to replace lamp with the power on. Always unplug the power cord from the generator or power source when changing the lamp.
- **ALWAYS** allow a sufficient amount of time for the lamp to **cool** before changing. The possibility exists of severe burns.

CAUTION

- **NEVER** use force when installing the lamp. Excessive force could cause the lamp to break, causing bodily harm.

NOTICE

- **NEVER** leave any grease or oil residue on lamp surface when replacing or removing lamp. This can create hot spots, reducing the service life of the lamp.
- **ALWAYS** make sure lamp surface is clean and dry.
- **ALWAYS** replace with MQ recommended type lamp. See parts section of this manual.
- If applicable, **ALWAYS** make sure the lamp guard is installed correctly. **NEVER** deform the lamp guard.
- **NEVER** unplug the lamp's AC power cable during operation.
- **ALWAYS** have a **trained technician** to install and remove lamp or replace any damaged fixture wiring.

TRANSPORTING SAFETY

NOTICE

- When transporting the tripod lighting system, if applicable, always place in **stow position** and place tripod in its carrying case.
- **ALWAYS** remove balloon/lamp assembly from the mast when transporting lighting system. This will prevent damage to the bulb due to vibration.
- **NEVER** leave the balloon/lamp exposed during transport. Exposure to excess wind or rain could damage the balloon's nylon cover.
- **ALWAYS** place balloon inside its protective cover during transport. Be sure the cover is secured tightly around the balloon/lamp assembly.

SAFETY INFORMATION

BALLOON SAFETY

WARNING

- To prevent serious burns, **NEVER** touch or unzip the balloon envelope when the lamp is on.



CAUTION

- **ALWAYS** keep the balloon away from sharp objects and excessive amounts of heat.

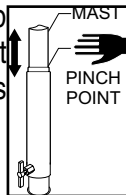
NOTICE

- To prevent balloon deformation, **NEVER** use lighting system in strong winds.
- **DO NOT** place the balloon inside its protective cover until the lamp has had a sufficient amount of time to cool down. This will prevent the balloon's nylon cover from being burned (touching the lamp surface).
- **ALWAYS** place the balloon inside its protective cover after each use. This will prolong the life of the balloon material, keeping it protected from harsh environmental elements.
- Replace balloon immediately if damaged. A damaged balloon will not inflate properly, and may become more damaged by touching the hot lamp surface.
- **DO NOT** use excessive force when zipping and unzipping the balloon. Be gentle with the zipper mechanism. If the zipper is broken, the balloon will become unusable.

MAST SAFETY

CAUTION

- When raising or lowering the mast, keep hands and fingers clear of the various mast sections, this will prevent hands and fingers from getting pinched.
- **NEVER** attach anything to the mast.
- **ALWAYS** lower the mast when not in use, or if high winds or electrical storms are expected in the area.



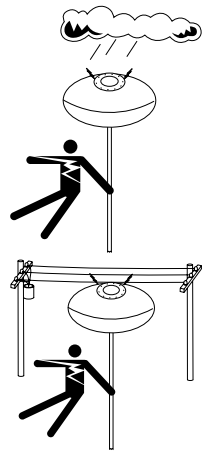
ELECTRICAL SAFETY

WARNING

- Lighting system is equipped with a ground pin on the power plug. For your protection, **ALWAYS** complete the grounding path. **NEVER** insert the AC power plug into a 2-prong receptacle to operate lighting system.

When applying power to the lighting system, **ALWAYS** connect the AC power plug to a 3-prong receptacle that is grounded. The possibility exists of **electrical shock, electrocution and even death** if the lighting system is not grounded.

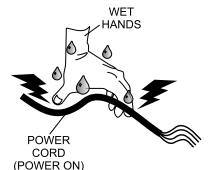
- **NEVER** operate lighting system or handle any electrical equipment while standing in water, while barefoot, while hands are wet or in the rain. A dangerous **electrical shock** could occur, causing **severe bodily harm or even death**.
- **ALWAYS** make sure the area above the lighting system is open and clear of overhead power lines and other obstructions. Contact with overhead power lines or other obstructions could result in equipment damage, **electrical shock, electrocution and even death**.



Power Cord/Cable Safety

WARNING

- **NEVER** let power cords or cables lay in water.
- **NEVER** use **damaged** or **worn** cables or cords. Inspect for cuts in the insulation
- **NEVER** grab or touch a live power cord or cable with wet hands. The possibility exists of **electrical shock, electrocution or death**.
- Make sure power cables are securely connected. Incorrect connections may cause **electrical shock** and damage to the lighting system.



NOTICE

- **ALWAYS** make certain that proper power or extension cord has been selected for the job. See Cable Selection Chart in this manual.

Table 1. Specifications	
Globug Lighting System	
Model	GB12BW/BS/BP
Input Voltage	90-130,170-240 VAC
Ballast	Electronic Ballast (50Hz/60Hz)
Frequency	50 Hz/ 60 Hz Single-Phase
Max. Current	3.8 Amps
Lamp	
Lamp Type	400 Watt Metal Halide
Lumens	34,200
Light Coverage (360°)	90 ft. (27.4 meters)
Surface Temperature (Longitudinal)	476.6°F (247°C) Max.
Surface Temperature (Transversal)	417.2°F (214°C) Max.
Fan Motor	
Balloon Fan Motor	24 VDC
Max. Current	1.2 A
Pressure	0.324 kPA (0.047 psi)
Balloon	
Diameter	33 in. (850 mm)
Material	Polyester
Heat Resisting Temperature	320 ~ 356°F (160 ~ 180°C)
Melting Temperature	500°F (260°C)
Internal Temperature of Balloon	126°F (52°C) Average
Water Resistance	1,500 mm H ₂ O
Mast (GB12BW)	
Number of Stages	2
Maximum Height (Standard)	10 feet (3 meters)
Extension Pole	13 feet (4 meters)

DIMENSIONS (GB12BW)

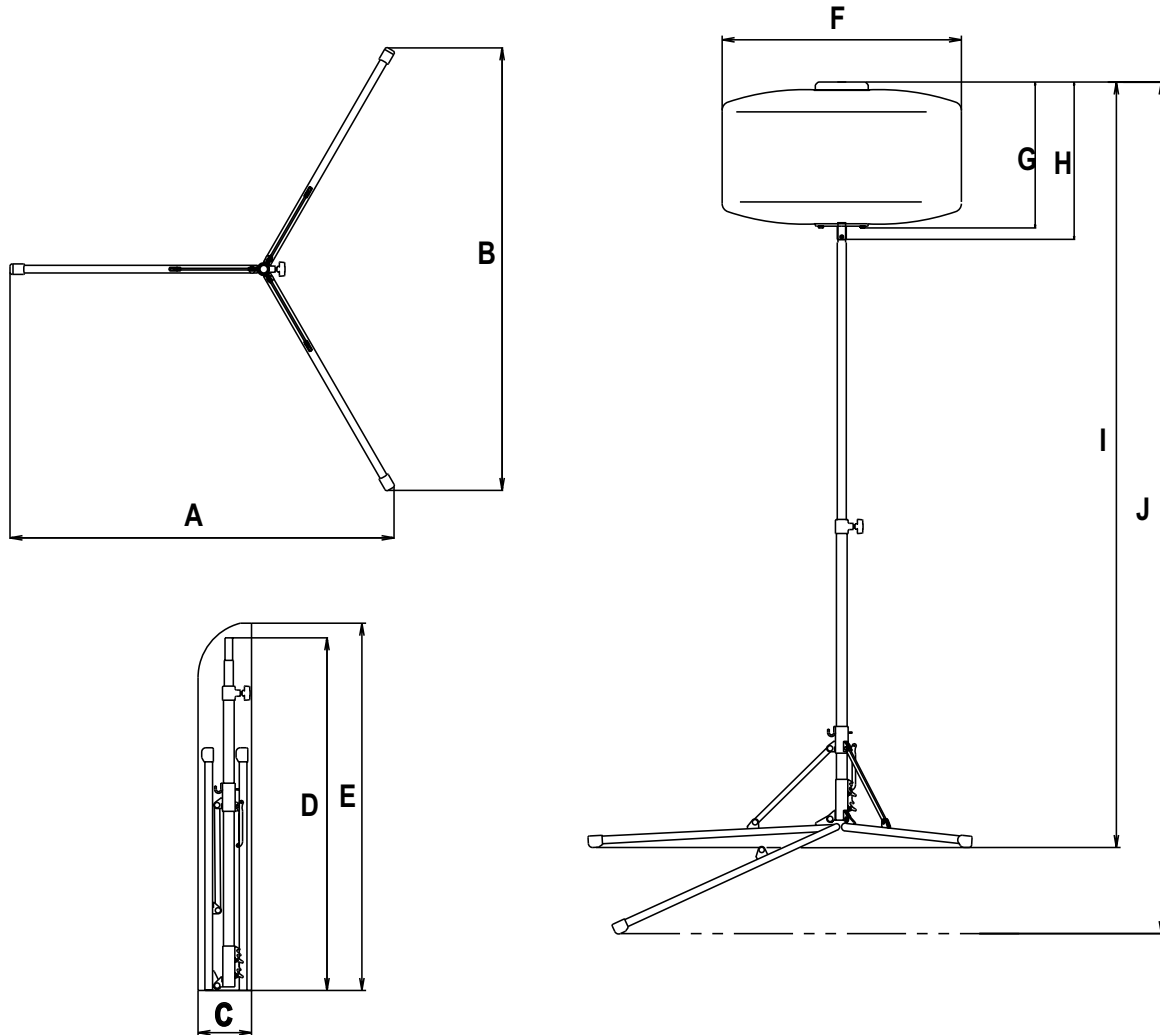


Figure 1. Dimensions (GB12BW)

Table 2. Dimensions			
Reference Letter	Dimension in. (mm.)	Reference Letter	Dimension in. (mm.)
A	Upper Position - 44.7 in. (1,135 mm.) Lower Position - 52.4 in. (1,330 mm.)	F	33.5 in. (850 mm.)
B	Upper Position - 52.2 in. (1,325 mm.) Lower Position - 62.0 in. (1,575 mm.)	G	22 in. (560 mm.)
C	7.5 in. (190 mm.)	H	23.6 in. (600 mm.)
D	49.5 in. (1,258 mm.)	I	79.2 - 111 in. (1910 - 2820 mm.)
E	51.2 in. (1,300 mm.)	J	90.4 - 126.2 in. (2295 - 3205 mm.)

DIMENSIONS (GB12BS)

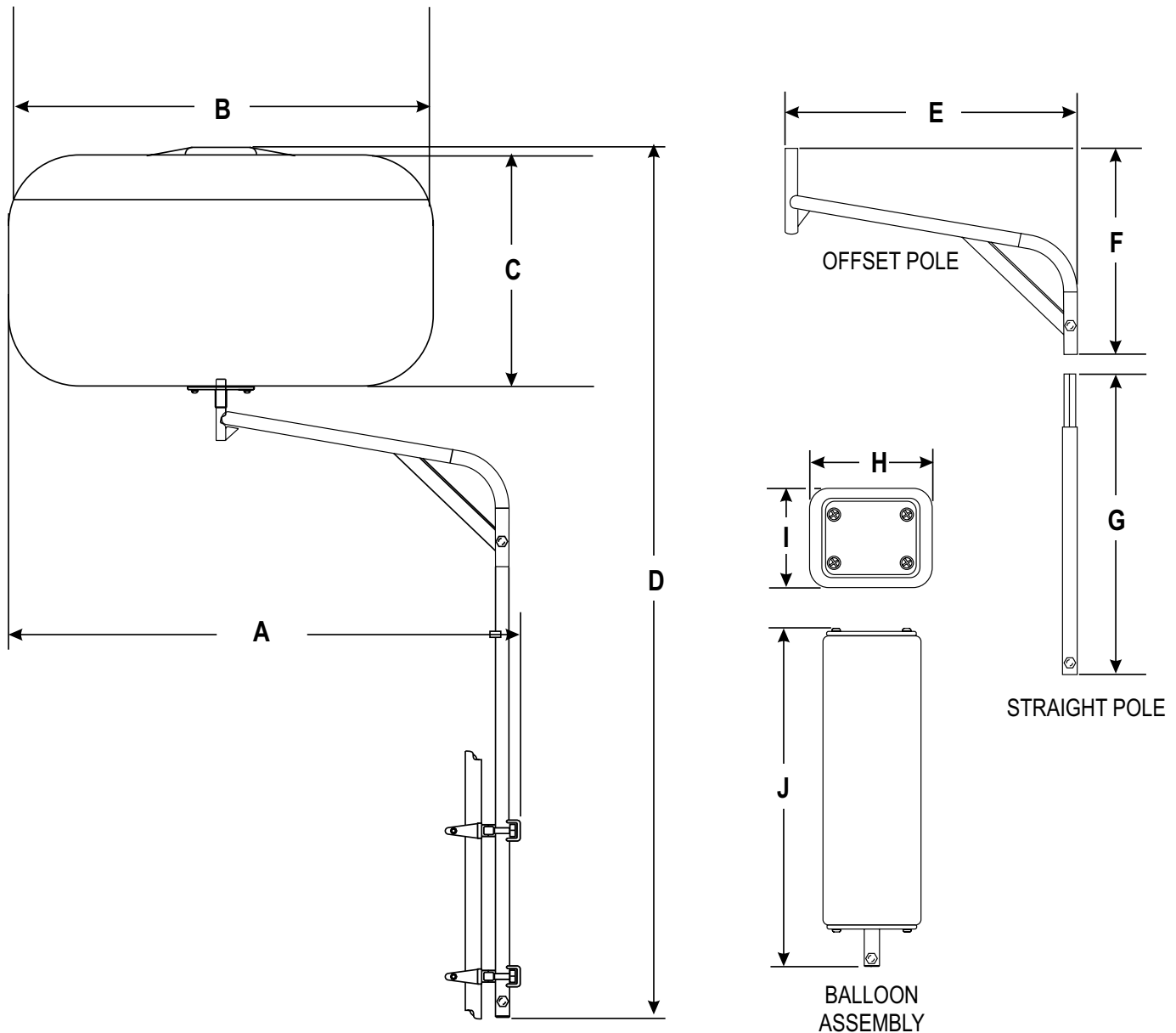


Figure 2. Dimensions (GB12BS)

Table 3. Dimensions			
Reference Letter	Dimension in. (mm.)	Reference Letter	Dimension in. (mm.)
A	43.7 (1110)	F	16.7 (425)
B	33.4 (850)	G	39.3 (1000)
C	21 (535)	H	8.7 (220)
D	74.6 (1895)	I	7.8 (200)
E	26.8 (683)	J	23.6 (600)

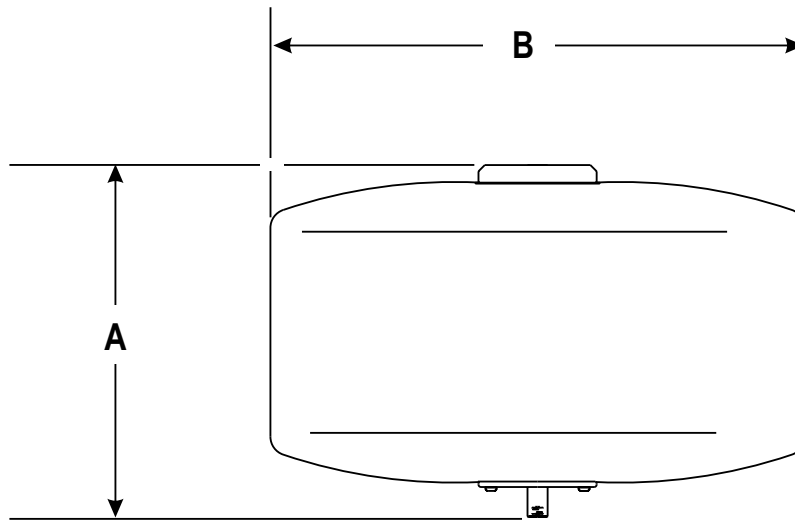
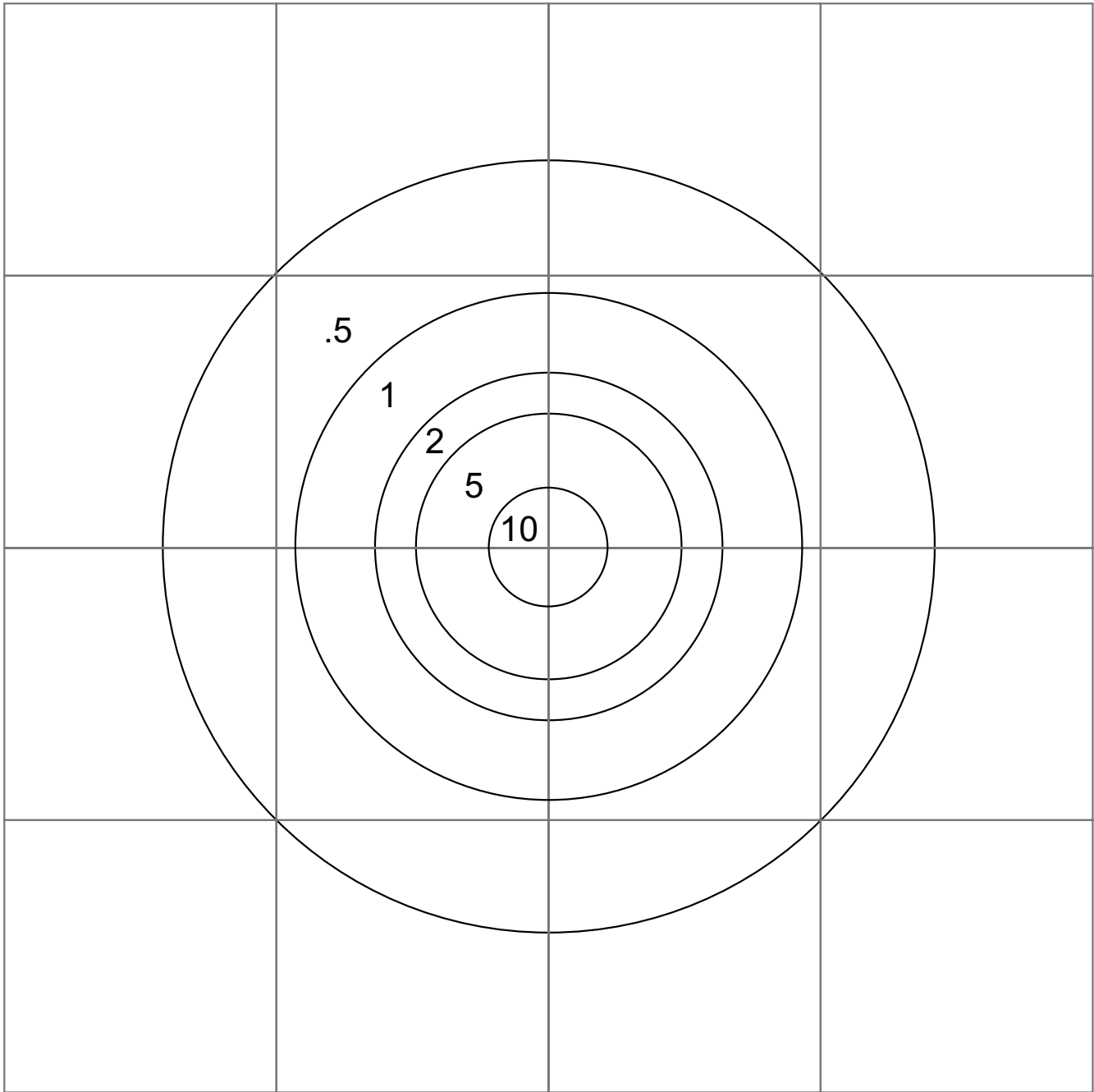


Figure 3. Dimensions (GB12BP)

Table 4. Dimensions	
Reference Letter	Dimension in. (mm.)
A	23.6 in. (600 mm.)
B	33.0 in. (850 mm.)

FOOTCANDLE PLOT



Values listed as footcandles

Scale: Grid = 50 ft. (15.25 meters)

**Figure 4. Floodlight Candle Plot (BAL 85-Drum Shaped)
300-Degree Coverage**

GENERAL INFORMATION

The Multiquip GloBug GB12W, GB12BS and GB12BP are general purpose, portable, glare-free lighting systems. Typical applications for these types of lighting systems include construction sites, emergency road crews and backyard parties.

BALLOON ENVELOPES

The GloBug lighting system can be configured with a variety of balloon envelopes (canopy). Please contact the MQ sales department for the balloon of your choice. The GloBug GB12BW, GB12BS and GB12BP are shipped from the factory with the drum type balloon.

LIGHTING

Multiquip's GloBug lighting system is comprised of one "Metal Halide" 400-watt lamp. This lamp has an output of 34,200 lumens. Typical lighting coverage is in excess of 90 feet (27 meters) in a 360 degree pattern.

POWER

These GloBug lighting systems are powered by a light weight electronic ballast that is built inside the lamp housing. The input power requirements for operating the lighting system is 120 VAC, 60 Hz @ 4.5 amps.

SETUP (GB12BW)

The GB12BW lighting system can be setup quickly and easily. Tripod legs can be deployed in one quick easy step and can be adjusted to two different heights. The upper position will add an additional foot to the mast height. If desired, an optional 35-inch (900 mm) extension pole can be added to the mast height. Please contact the MQ sales department if you wish to add this feature to your system.

In addition the unit is equipped with an air-assist mast lowering system. This system allows the mast to be retracted slowly so that the mast will not fall rapidly when released. This feature reduces the amount of vibration or shock to the lamp.

SETUP (GB12BS)

The GB12BS lighting system (offset pole) is designed to be attached to a external piece of a equipment such as a paver (Figure 5). This system is equally easy to assemble. Simply attach the supplied support clamps to an external pole or support and you are ready.

GB12BP

When only a complete lamp assembly is required, please order Model GB12BP. This model number includes the

lamp, protective guard, balloon protective covering and all other components that make up the lamp assembly.

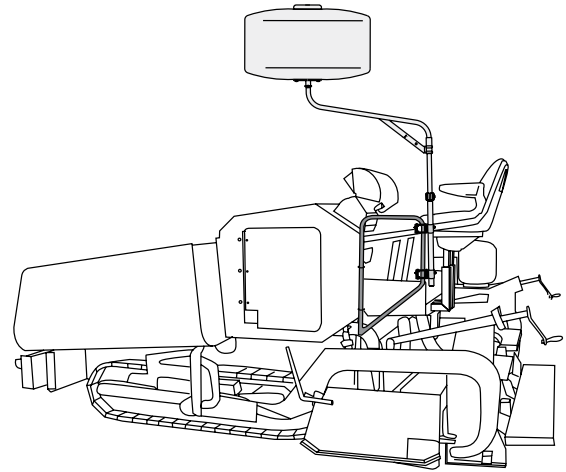


Figure 5. GB12BS Attachment (Paver)

TRANSPORT

The GB12BW lighting system can be transported (Figure 6) quite easily in two carrying cases. The first case (tripod) weighs 16 lbs. (7.25 kg) and the second case (lamp assembly) weighs 15 lbs. (6.8 kg) for a combined weight of about 31 lbs. (14 kg).

For ease of service or transport, the lamp assembly is equipped with a quick-disconnect connector that allows the lamp fixture to be removed quickly. This feature is extremely useful during transport of the lighting system. It is always best to remove the lamp and pack it safely so it will not be damaged.

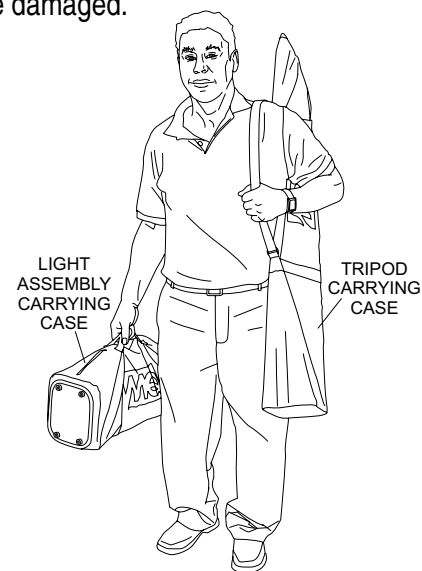


Figure 6. GB12BW Transporting

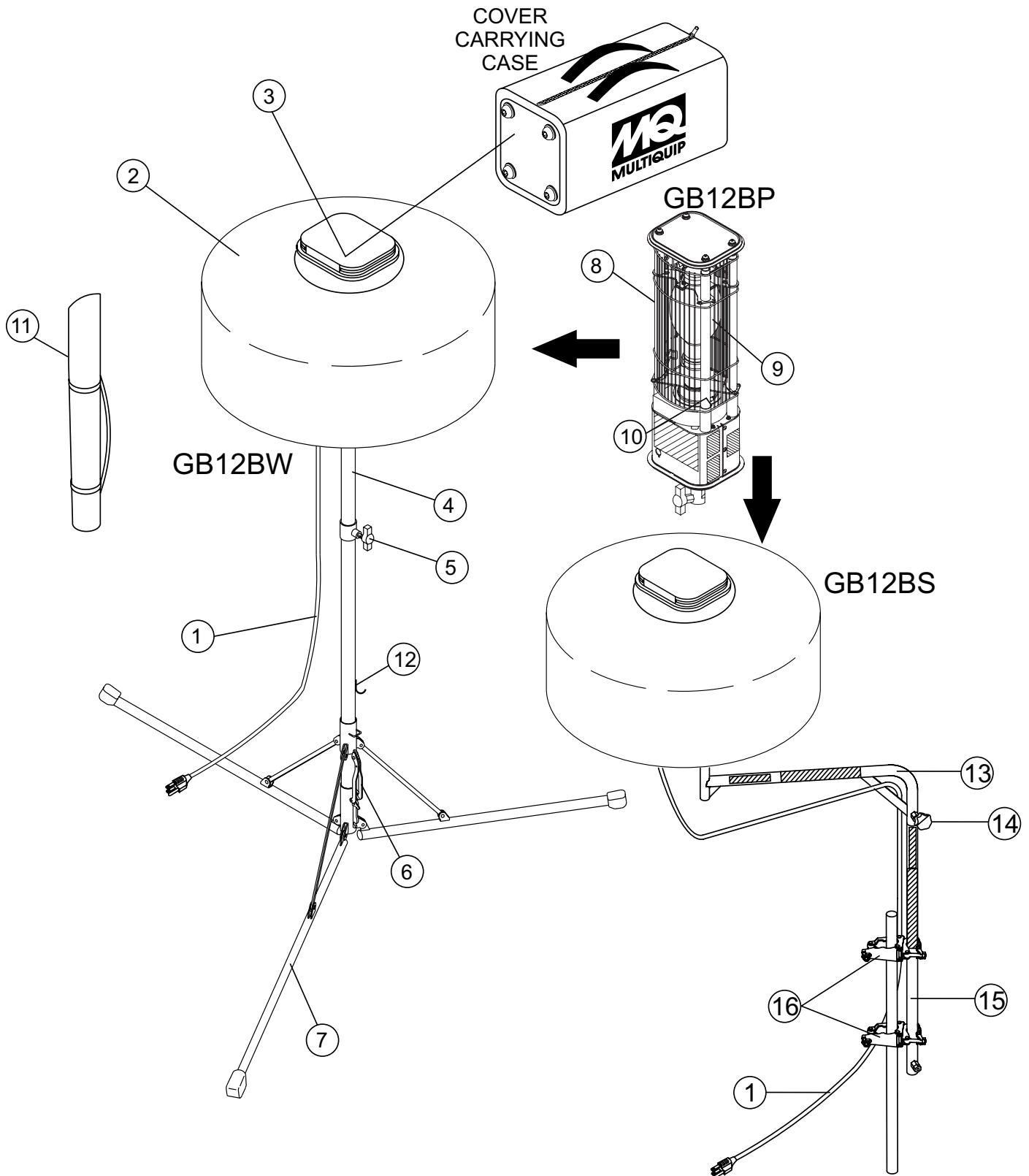


Figure 7. Major Components

Figure 7 shows the location of the components for the GloBug lighting system. The function of each component is described below:

1. **AC Power Cable** — Connect this cable to a 120 VAC, 60 Hz power source.
2. **Balloon** — This balloon is made of heat-resistant polyester, with a diameter of 33 inches (850 mm).
3. **Balloon Cover/Carrying Case** — When zipped, this protective cover acts like a carrying case. The complete lamp assembly is enclosed within the cover-carrying case. Allow a sufficient amount of time for the lamp to cool down before covering balloon. The possibility exists of the balloon getting burned.
4. **Mast** — Two stage air-assist mast. Maximum mast height is 10 ft. (3 meters) without optional extension pole. With optional extension pole, height increases to 13 ft. (4 meters). When raising the mast, always be on the lookout for overhead obstructions.
5. **T-Handle Bolt Lock** — Always tighten this lock to hold the lamp/balloon securely in place before raising mast.
6. **Tripod Release Latch** — Use this latch to deploy and lock tripod legs. For ease of use, the latch mechanism is attached to a velcro strap.
7. **Tripod** — Unbuckle velcro strap securing tripod legs (3), push down on any tripod leg until all tripod legs are fully deployed. To place tripod legs in the stow position, pull upward on velcro strap while pushing down on tripod pole. Pull all legs upward and secure with velcro strap.
8. **Lamp Guard** — This guard (cage) protects the lamp from being hit by objects.
9. **Lamp** — 400 watt metal-halide type lamp. Replace only with MQ recommended type lamp. Always allow a sufficient amount of time for the lamp to cool down before changing.
10. **Fan Motor (Blower)** — This electric motor is responsible for inflating the balloon. It will supply a pressure of 0.6-inch H₂O (.0217 psi /0.149 kPa). Please note that the balloon will begin to inflate as soon as power is applied to the lighting system.
11. **Tripod Carrying Case** — Use this case when transporting of the tripod is required. **ALWAYS** store tripod in this carrying case when not in use.
12. **Weight Support Hook** — To add additional weight to the tripod and make the tripod more stable in windy conditions. Place a sandbag or similar weight onto this hook.
13. **Offset Pole** — Supports lamp assembly when attached to the straight pole.
14. **Knob** — Secures the offset pole to the straight pole when tightened.
15. **Straight Pole** — Used in conjunction with the offset pole to support the lamp assembly.
16. **Clamps** — Used to attach the straight pole to an external support. These clamps must be tightened securely to prevent the light assembly from falling off.

TRIPOD DEPLOYMENT (GB12BW)

1. Place the tripod on a firm level surface so that it will not slide or turn over. Make sure there is enough space around the unit for the tripod legs to be deployed.
2. Remove tripod from its carrying case. The tripod legs are secured by a black velcro strap (Figure 8). Squeeze both tabs on each side of buckle to unlock strap and allow tripod legs (Figure 9) to be deployed.

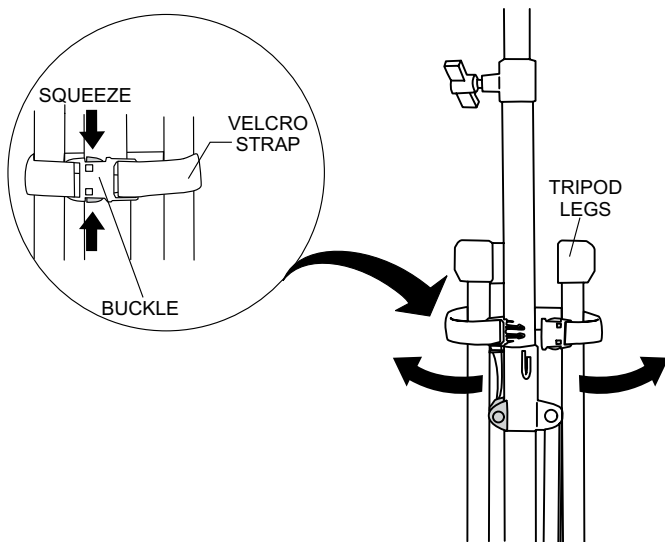


Figure 8. Velcro Strap (Open)

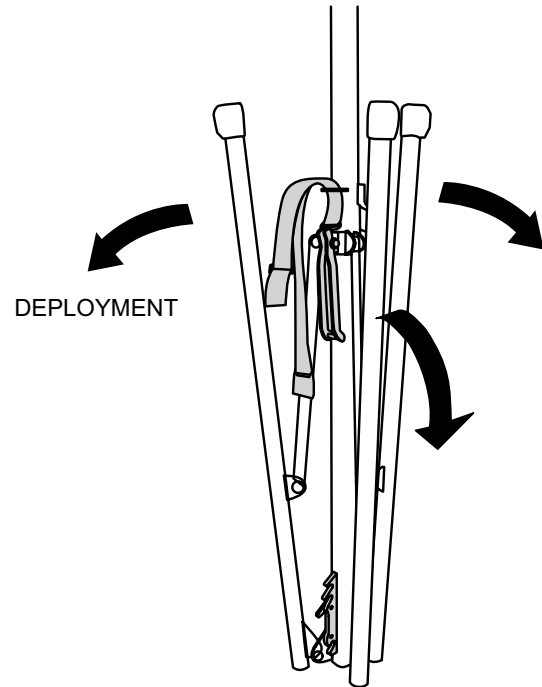


Figure 9. Tripod Deployment

3. Next, pull upward on the mast and let the tripod legs deploy. Once the tripod legs have been fully deployed make sure the legs are locked by securing the latch.

The latch (Figure 10) has two positions, upper and lower. Placing the latch in the upper position will provide 1 ft. (305 mm) more height.

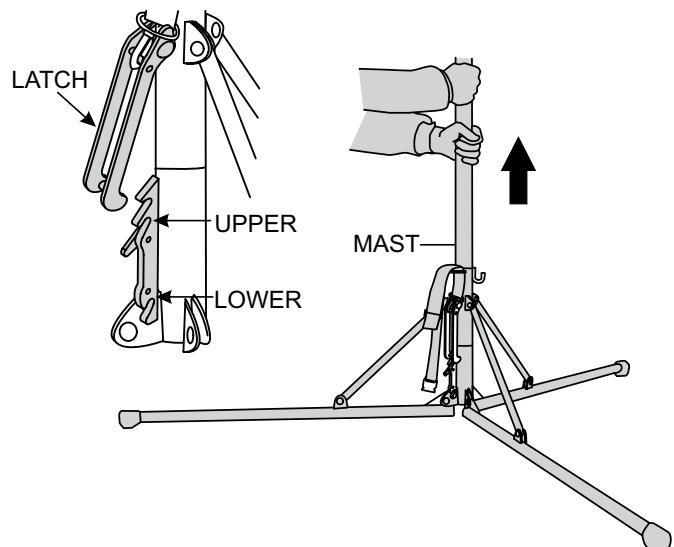


Figure 10. Securing the Tripod

BALLOON ASSEMBLY PLACEMENT (GB12BW)

1. Place balloon assembly (Figure 11) onto mast and tighten Upper T-handle.

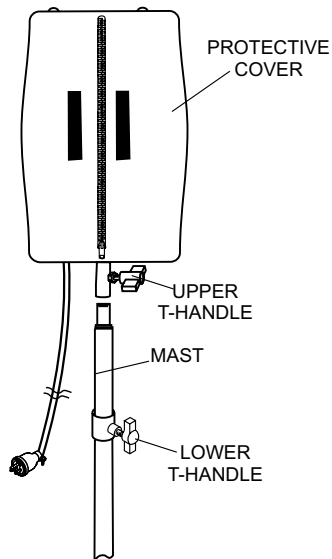


Figure 11. Light Assembly Placement

2. Expose the balloon by pulling down on the velcro tab and unzip the protective cover as shown in Figure 12. Also remove the AC power cord at this time.

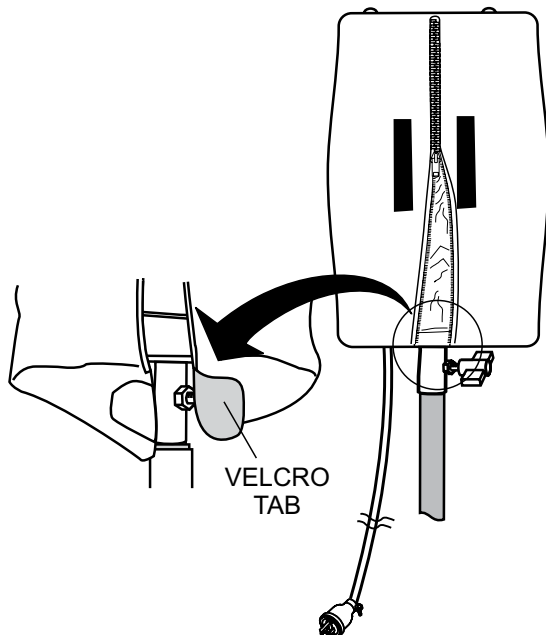


Figure 12. Removing Balloon/AC Power Cord

3. Next, fold the protective cover (Figure 13) into itself and zip.

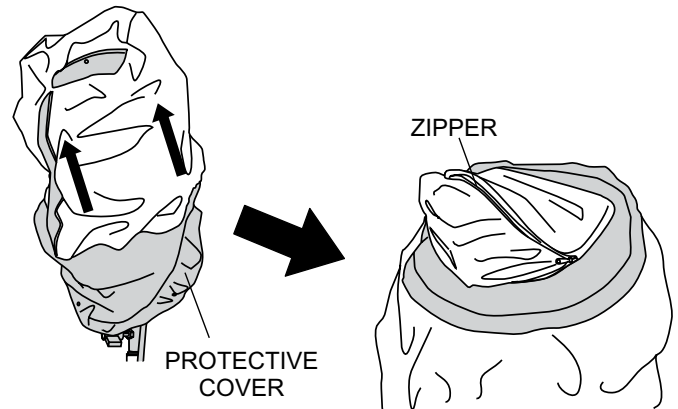


Figure 13. Folding Protective Cover

4. Attach the S-type hook (Figure 14) on the AC power cable onto the washer-eylet located on the bottom plate of the light assembly.

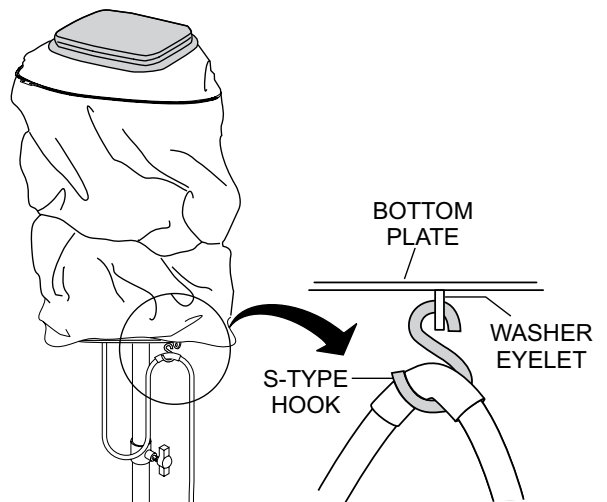



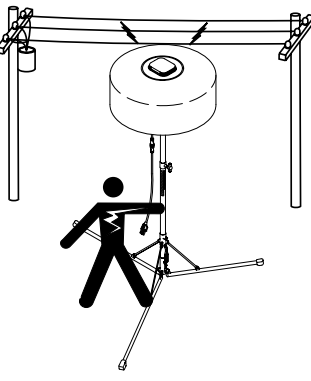
Figure 14. Securing Power Cord

SETUP (GB12BW)


RAISING THE MAST (GB12BW)

1. Before raising the mast, make sure the upper T-handle bolt lock (Figure 15) is securely tightened. This will prevent the balloon/lamp assembly from falling off. In addition make sure that the lamp power cable is connected to the mating end of the 15 ft (4.5 meters) power source cable.


 **DANGER**




ALWAYS make sure the area above the lighting system is open and clear of overhead power lines and other obstructions. The mast extends in excess of 13 ft. (4 meters) when an optional extension is used. Contact with overhead power lines or other obstructions could result in equipment damage, serious injury or death!

 **CAUTION**

When raising mast, **ALWAYS** be on the lookout for overhead obstructions such as high voltage power lines. The possibility exists of electrocution, even death! if the lighting system comes in contact with high voltage power lines.

 **DANGER**



When raising mast, **ALWAYS** be on the lookout for overhead obstructions such as high voltage power lines. The possibility exists of electrocution, even death! if the lighting system comes in contact with high voltage power lines.

2. To improve stability and to prevent tipping of the light unit, place sand bags or similar type weight over the tripod legs or weight hook as shown in Figure 15.

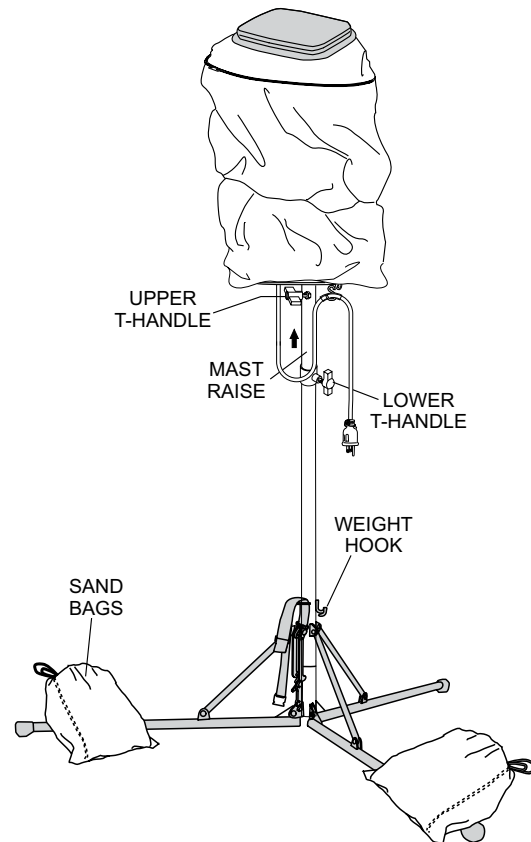


Figure 15. Sand Bags

3. Raise mast to desired height and tighten lower T-handle (Figure 15) securely.

OPERATION (GB12BW)

APPLYING POWER (GB12BW)

1. Before applying power, make sure that the Power **ON/OFF** switch (Figure 16) is in the OFF position.

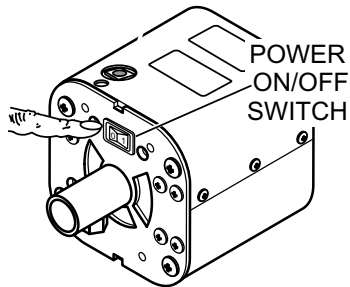


Figure 16. ON/OFF Switch

2. Connect the AC power cable to the 120 VAC receptacle on the generator used. See Figure 17.

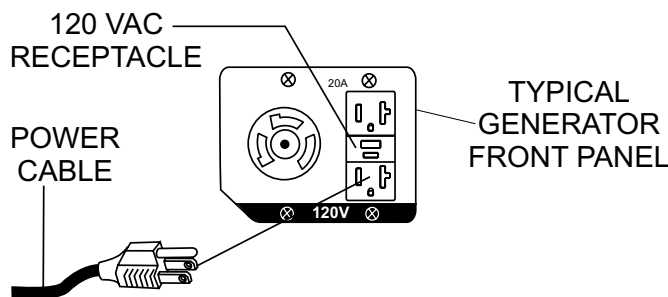


Figure 17. Connecting to Power Source

3. Start the generator as indicated in the generator manual.
4. Turn on the Power **ON/OFF** switch (Figure 16). The balloon will start to inflate and the lamp will turn on.

DIMMING THE LAMP

1. Slightly unzip the bottom of the balloon to gain access to the dimmer switch (Figure 18).

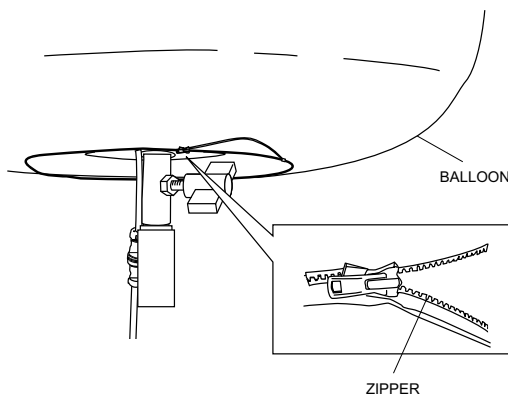


Figure 18. Unzipping Balloon

2. Press the dimmer switch lightly (Figure 19). The LED will blink. The lamp should dim to about 75% brightness.

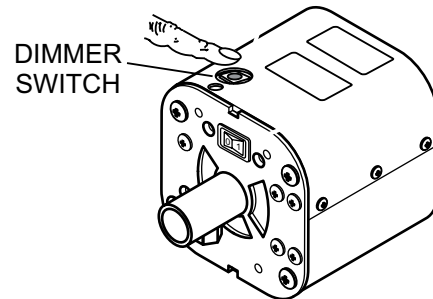


Figure 19. Dimmer Switch

3. To turn back the lamp to its original brightness, press the dimmer switch again. The LED will turn off.
4. To turn off the lamp while keeping the balloon inflated, press and hold the dimmer switch for three seconds. The LED will light red.
5. Zip up the bottom of the balloon completely after use of the dimmer switch.

NOTICE

To turn on lamp again, after it was turned off with the dimmer switch, turn off the Power **ON/OFF** switch. Wait three to five minutes then turn the **ON/OFF** switch back on. The lamp will now light back to 100% brightness.

NOTICE

If the power cable is accidentally unplugged from the power source, wait three to five minutes before reconnecting the power. This will allow time for the fan to reset and ensure balloon will inflate properly when power is reconnected.

SHUTDOWN

1. Turn off the power switch of the generator.
2. Turn off the Power **ON/OFF** switch. The balloon should start to deflate and the lamp will turn off.
3. Disconnect the AC power cable from the generator.

CAUTION

Allow a sufficient amount of time (15-20 minutes) for the lamp to cool down. The possibility exists of the balloon getting burned (touching the lamp).

STORAGE

1. Loosen the lower T-handle by turning handle counterclockwise (Figure 20). Push down on mast until mast is fully inserted into mast housing. Tighten T-handle fully.

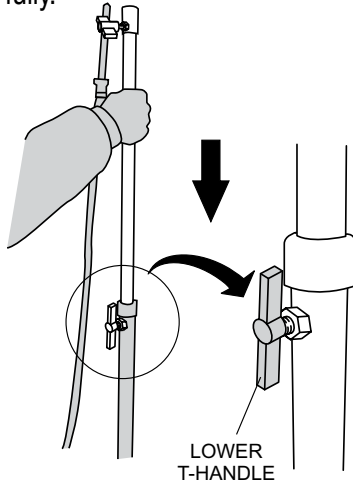


Figure 20. Lowering the Mast

2. Unzip the zipper on the protective cover (Figure 20), and pull down cover over balloon/lamp assembly.

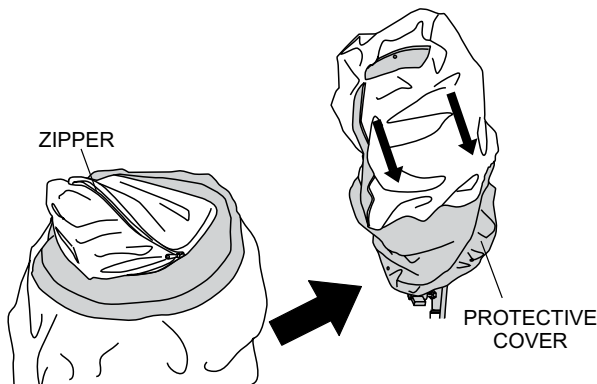


Figure 21. Unzipping the Protective Cover

3. Unhook lamp AC power cable from washer eyelet (Figure 14). Fully zip protective cover and fold velcro tab in place (Figure 22).

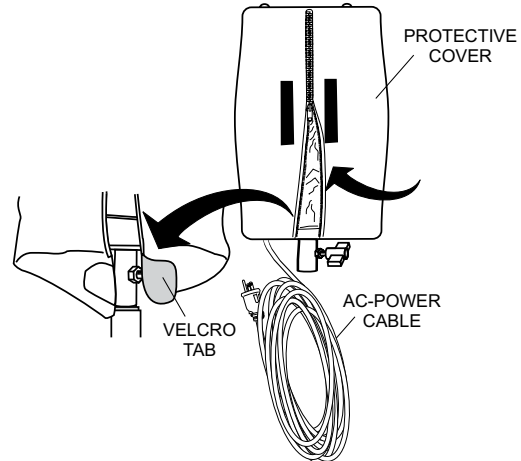


Figure 22. Zipping the Protective Cover

4. Loosen upper T-handle by turning counterclockwise and lift lamp assembly from mast.
5. Store lamp assembly enclosed with its protective cover (Figure 23) in a safe location where it will not be damaged.



Figure 23. Storing Lamp Assembly

6. To retract tripod legs (Figure 24) and place in the stow position, lift up on mast while pulling up on the velcro strap. Continue pulling upward on the mast until the tripod legs are fully retracted and are in the stow position.

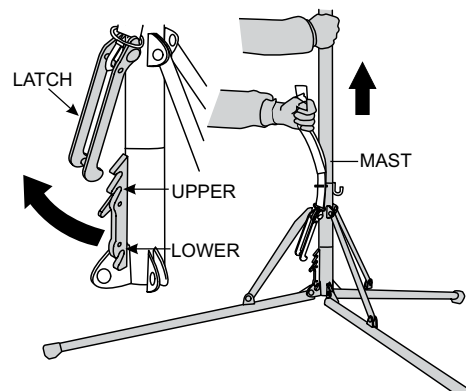


Figure 24. Retracting Tripod Legs

- Once tripod legs are in the stow position, place velcro strap (Figure 25) around all three tripod legs. Secure tripod legs by inserting the male and female connector ends of the strap into each other.

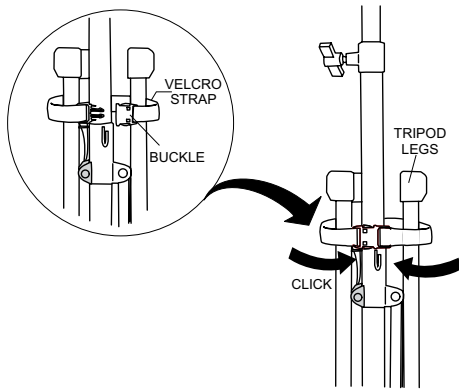


Figure 25. Velcro Strap (Closed)

- Place tripod (Figure 26) inside protective carrying case.

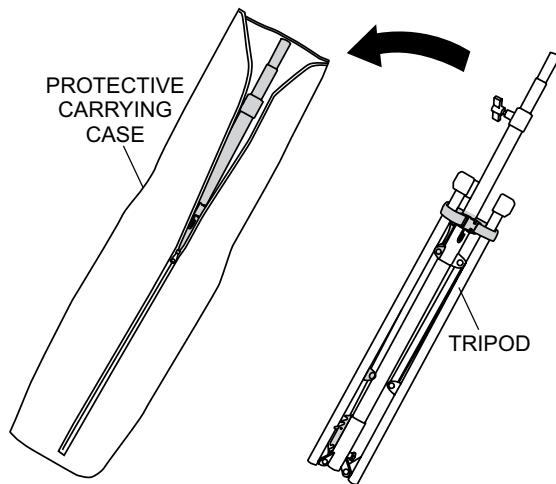


Figure 26. Carrying Case

POLE SETUP (GB12BS)

1. Attach one of the clamps that come with the GBS to the external support pole. The clamps may be attached to vertical, horizontal, or angled pole. See Figure 27.

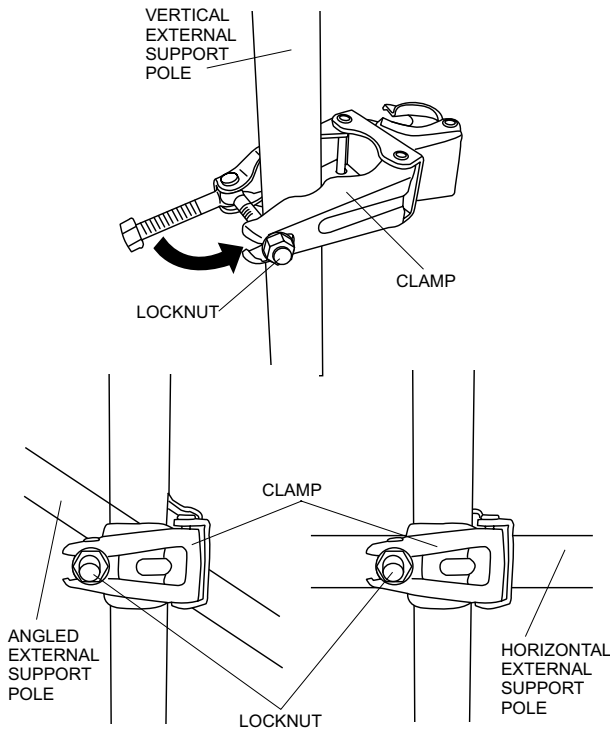


Figure 27. Clamp Attachment

2. Using a 19 mm wrench, tighten the locknut securely. See Figure 11.
3. Attach the other clamp to the external support pole about 7 inches (140 mm) lower than the previously installed clamp. See Figure 28. If using horizontal external support poles, a second pole is needed.

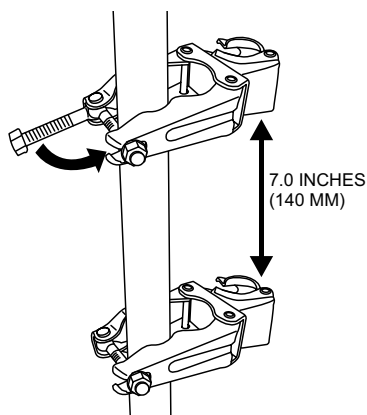


Figure 28. Distance Between Clamps

4. Attach the straight pole to the clamps. Tighten locknuts on both clamps. See Figure 29.

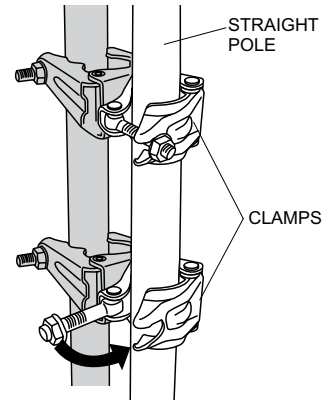


Figure 29. Straight Pole Attachment

WARNING

Always securely tighten the locknuts when assembly is used to prevent the lighting system from falling off which can cause injury or equipment damage.

5. Place the offset pole (or an optional straight pole, if desired) on top of the straight pole. Tighten knob or bolt securely. See Figure 30.

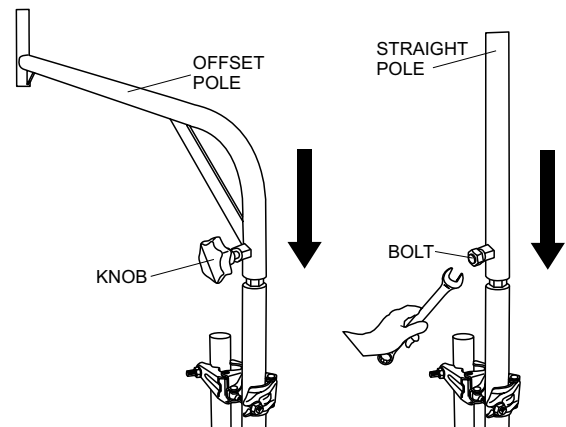


Figure 30. Offset Pole Attachment

WARNING

Always securely tighten the knob on the offset or the bolt on the straight pole when assembly is used to prevent the lighting system from falling off which can cause injury or equipment damage.

REMOVING THE PROTECTIVE COVERING (GB12BS)

1. Expose the balloon by pulling down on the velcro tab and unzipping the protective cover as shown in Figure 31.

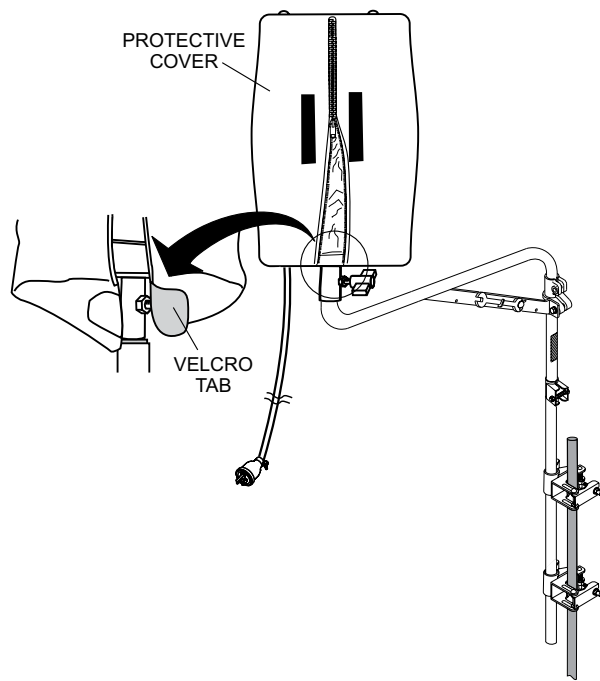


Figure 31. Removing Balloon/AC Power Cord

2. Next, fold the protective cover (Figure 32) into itself and zip.

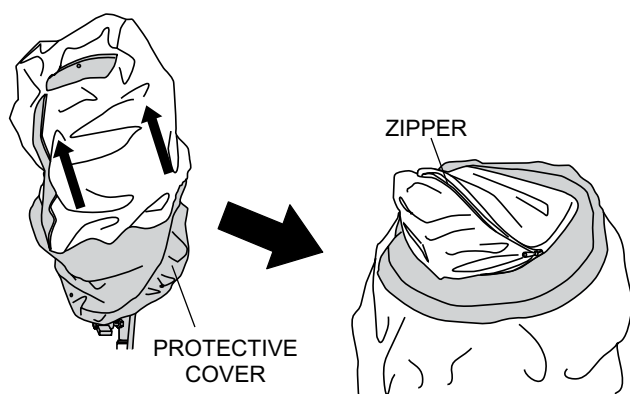


Figure 32. Folding Protective Cover

3. Attach both S-type hooks (Figure 33) on the AC power cable into the cable support holes on the offset pole.

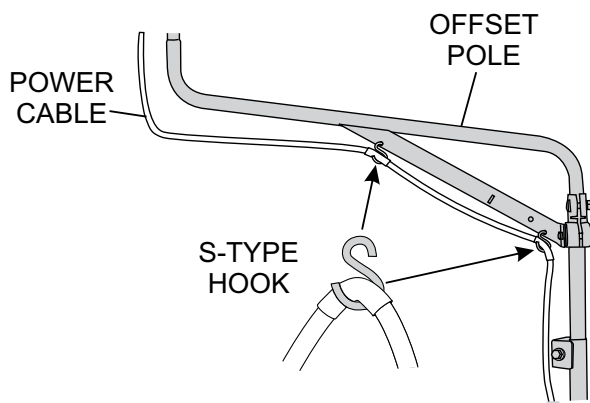



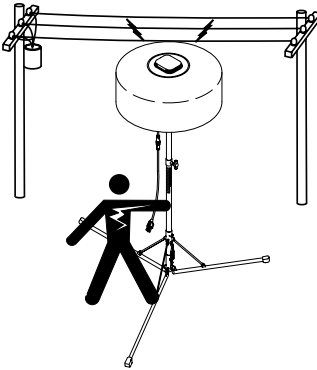
Figure 33. Attachment of S-Hooks

OPERATION (GB12BS)


RAISING THE MAST (GB12BS)


1. Before raising the mast, make sure the T-handle bolt lock is securely tightened. This will prevent the balloon/lamp assembly from falling off.
2. Raise extension pole to desired height. Watch out for any overhead obstructions.
3. Tighten extension clamp bolt securely.

 **DANGER**



ALWAYS make sure the area above the lighting system is open and clear of overhead power lines and other obstructions. The mast extends in excess of 13 ft. (4 meters) when an optional extension is used. Contact with overhead power lines or other obstructions could result in equipment damage, serious injury or death!

 **DANGER**



When raising mast, **ALWAYS** be on the lookout for overhead obstructions such as high voltage power lines. The possibility exists of electrocution, even death if the lighting system comes in contact with high voltage power lines.

APPLYING POWER (GB12BS)

1. If using a portable generator, start the generator as referenced in the "Start-up Section" of the supplied generator manual.
2. Once the generator has started, plug the AC power cord from the lamp into a GFCI receptacle on the generator.
3. If using a power source (Figure 34) other than a portable generator, plug the AC power cord from the lamp into a 120 VAC, 60 Hz receptacle that is protected by a at least a 15 amp circuit breaker.

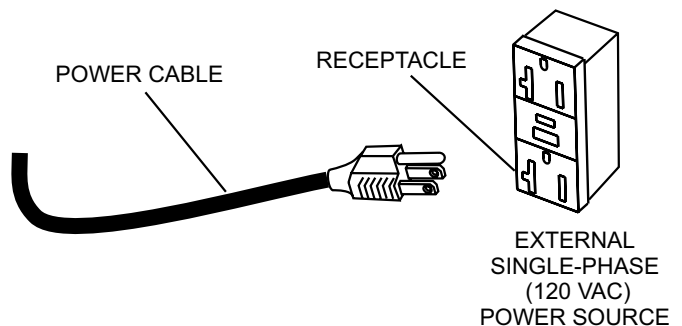


Figure 34. 120 VAC Receptacle

NOTICE

Refer to previous sections on Applying Power (GB12BW), Dimming the Lamp, and Shutdown for procedures in operating the lamp.

REPLACING THE LAMP

1. Allow lamp (Figure 35) 15-20 minutes to cool before changing.

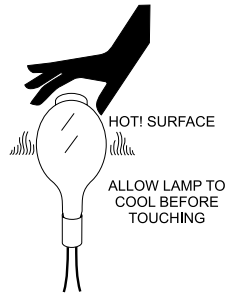


Figure 35. Hot Lamp Surface

2. If lamp assembly is attached to mast, loosen upper T-handle bolt lock that secures the lamp to the mast and remove.
3. Unzip the zipper at the bottom of the balloon. **DO NOT** use excessive force when unzipping the balloon.
4. Place lamp/balloon assembly on a suitable work bench that is free of dirt, and sharp objects that could damage the balloon.

NOTICE



DO NOT use excessive force when zipping or unzipping the balloon. The possibility exists of the zipper tearing, which would make the balloon unusable.

5. Roll the balloon envelope (Figure 36) upwards to expose the lamp.

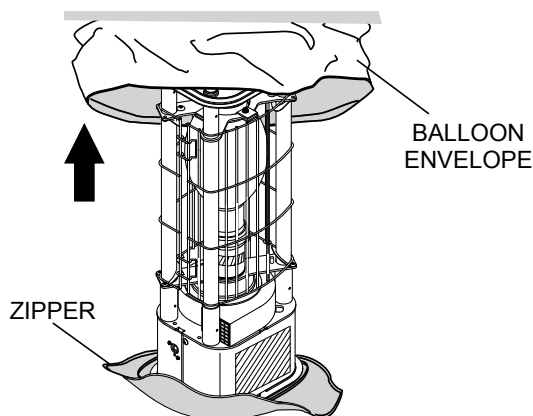


Figure 36. Rolling up Balloon Envelope

6. Release the lamp guard locking tabs (Figure 37).

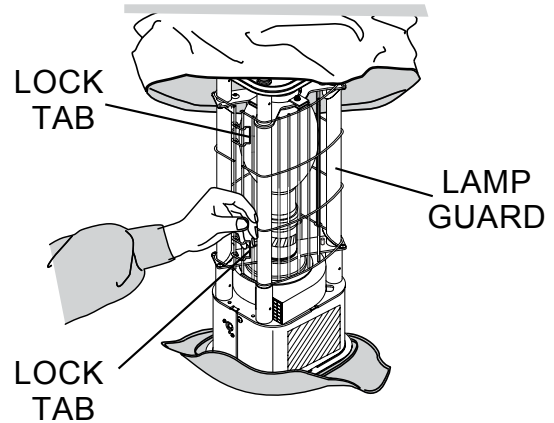


Figure 37. Releasing Lamp Guard Locking Tabs

7. Remove lamp guard (Figure 38).

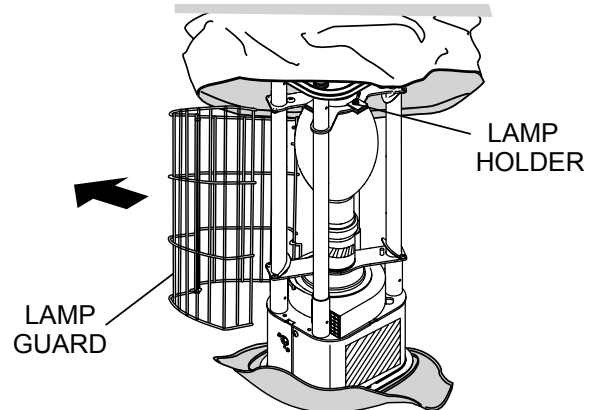


Figure 38. Lamp Guard Removal

8. Press tabs on the lamp holder and lift up holder to release lamp. Remove lamp (Figure 39) from lamp socket by turning lamp in a counterclockwise direction.

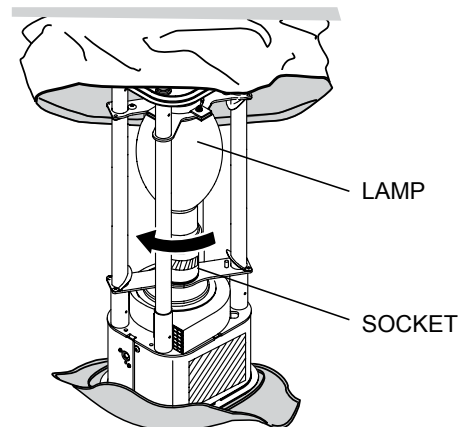


Figure 39. Removing Lamp

9. Install replacement lamp (Figure 40) into lamp socket and turn lamp in a clockwise direction until tight. Press tabs on the lamp holder and slowly bring down the holder to secure lamp in place.

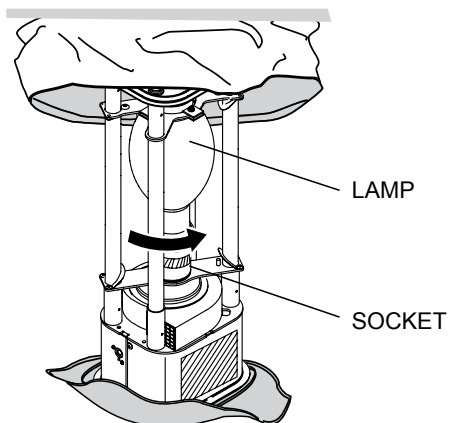


Figure 40. Installing Lamp

REPLACING BALLOON ENVELOPE

1. Unzip the zipper (Figure 38) at the top and bottom of the balloon envelope (cover).

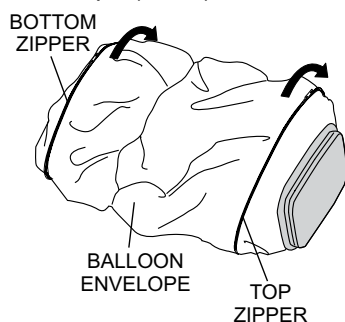


Figure 41. Unzipping the Balloon Envelope

2. Slide the old or worn balloon envelope (Figure 42) over the top of the lamp guard assembly.

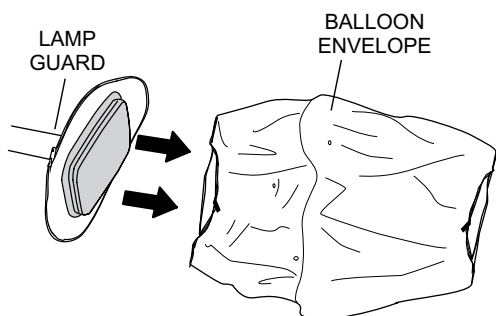


Figure 42. Removing the Balloon Envelope

3. Slide the new balloon (Figure 43) envelope over the top of the lamp guard assembly.

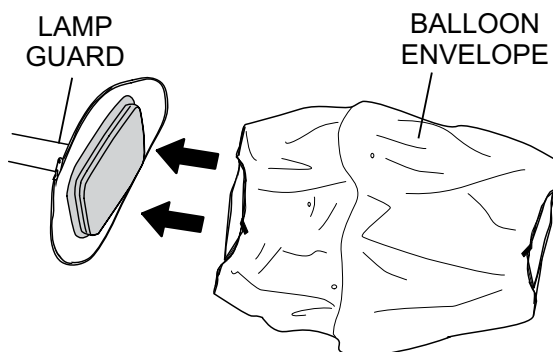


Figure 43. Installing New Balloon Envelope

4. Zip up the zipper (Figure 44) at the top and bottom of the balloon envelope (cover).

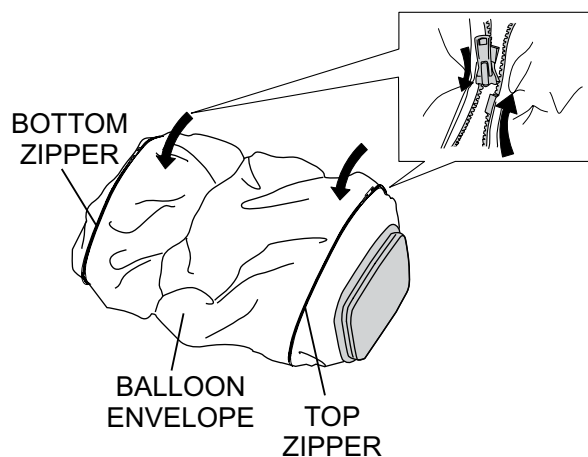


Figure 44. Zipping the Balloon Envelope

FILTER REPLACEMENT

1. Remove the balloon as described in the STORAGE section.
2. Turn the balloon/lamp assembly upsidedown to access the filter. See Figure 45.

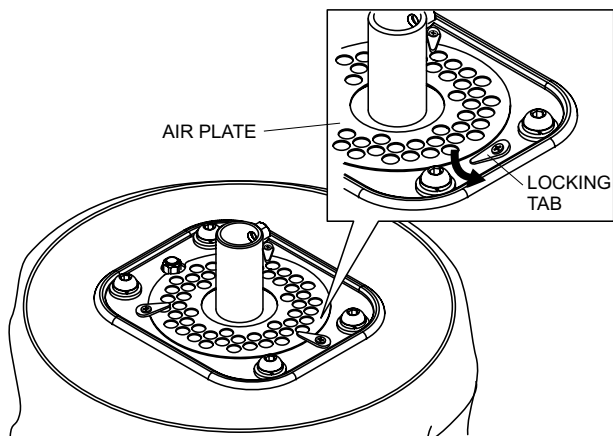


Figure 45. Accessing Filter

3. Turn the three locking tabs outwards to release the air plate. See Figure 45.
4. Remove the air plate and filter. See Figure 46.

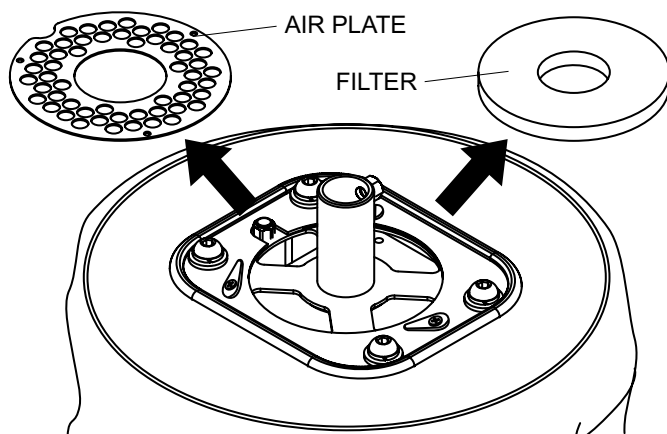


Figure 46. Filter Removal

5. Install a new filter and reinstall the air plate.

6. Turn the three locking tabs inwards to lock the air plate in place. See Figure 47.

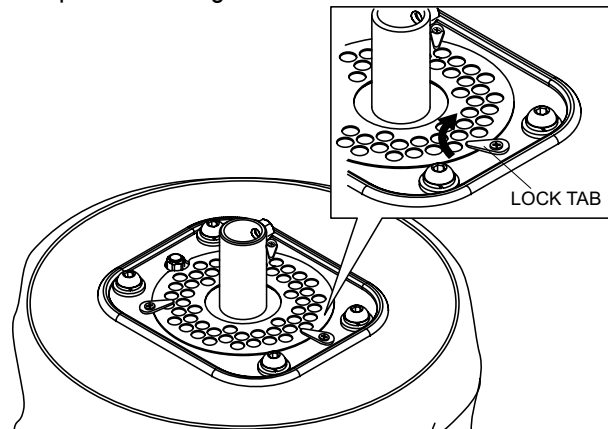


Figure 47. Locking Air Plate

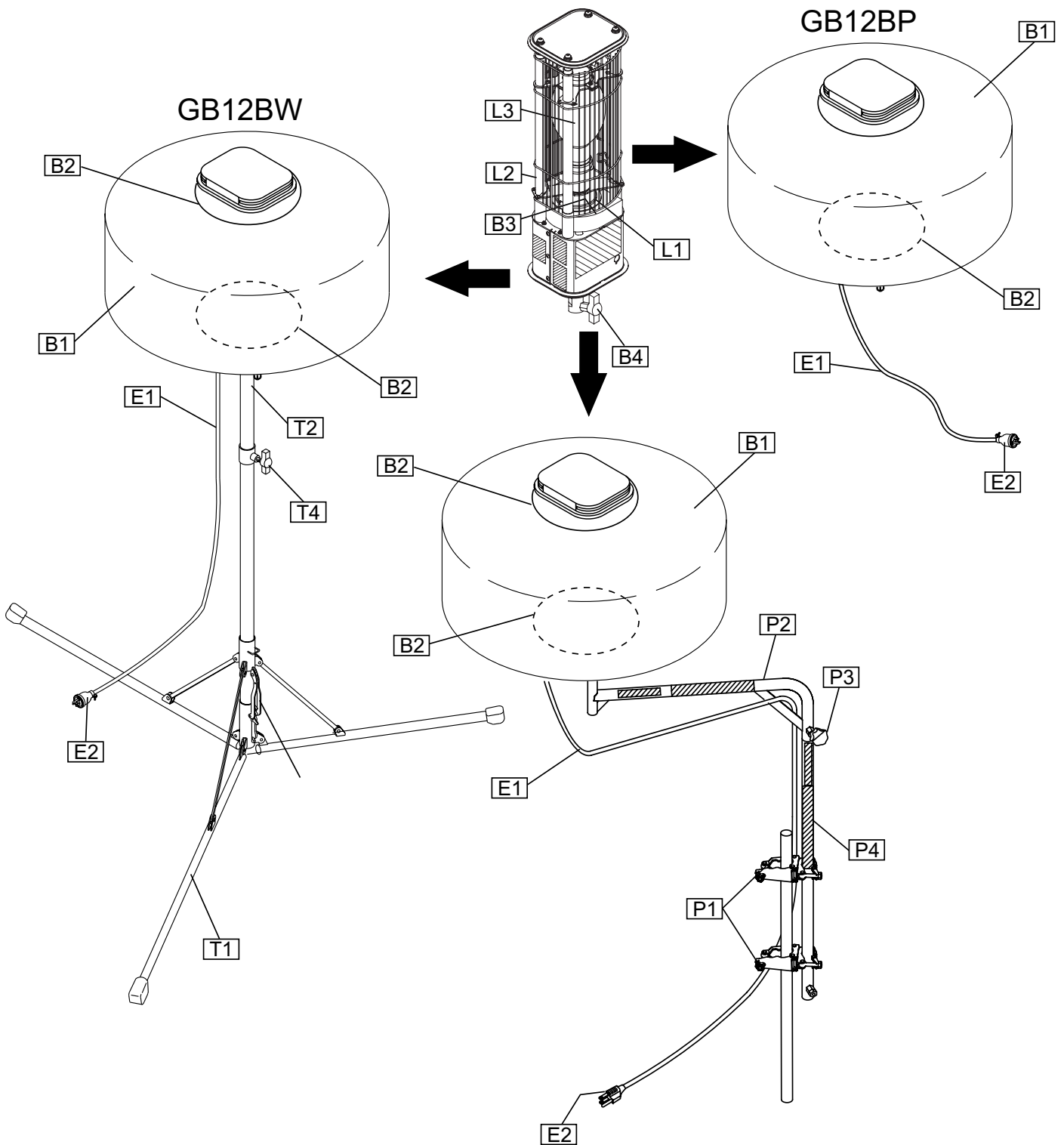


Figure 48. Maintenance Check Points

MAINTENANCE

For a prolonged life cycle an extended quality follow the recommended GloBug lighting system service guidelines as referenced in Figure 48 and Table 6.

Table 5. Periodic Check and Maintenance

Figure		Part	Check Item	Solution	
Lamp	L1	Lamp (Base)	Lamp base loose?	Screw in securely	❖
	L2	Pipe Frame	Frame pipe skewed?	Replace	❖
	L3	Lamp	Defective lamp?	Replace	■
Balloon	B1	Balloon (Envelope)	Defective or dirty?	Replace	❖
	B2	Zipper	Broken?	Replace	❖
	B3	Fan Motor (Blower)	Not working properly?	Repair or replace	❖
	B4	T-Handle bolt (Balloon)	Broken?	Replace	❖
Electric	E1	Power Cable	Defective or worn cable?	Replace.	❖
	E2	Plug	Damaged?	Replace	❖
Tripod	T1	Tripod	Damaged or not working properly?	Replace	■
	T2	Mast	Damaged or not working properly?	Replace	❖
	T3	Latch	Damaged?	Replace	❖
	T4	T-Handle bolt (Mast)	Damaged?	Replace	❖
Pole	P1	Clamp	Broken?	Replace	❖
	P2	Offset pole	Offset pole bent or damaged?	Replace	❖
	P3	Knob	Loose?	Tighten securely	❖
	P4	Straight pole	Straight pole bent or damaged?	Replace	❖
❖ - Daily Check ■ - Every 20 Hours					

WIRING DIAGRAM

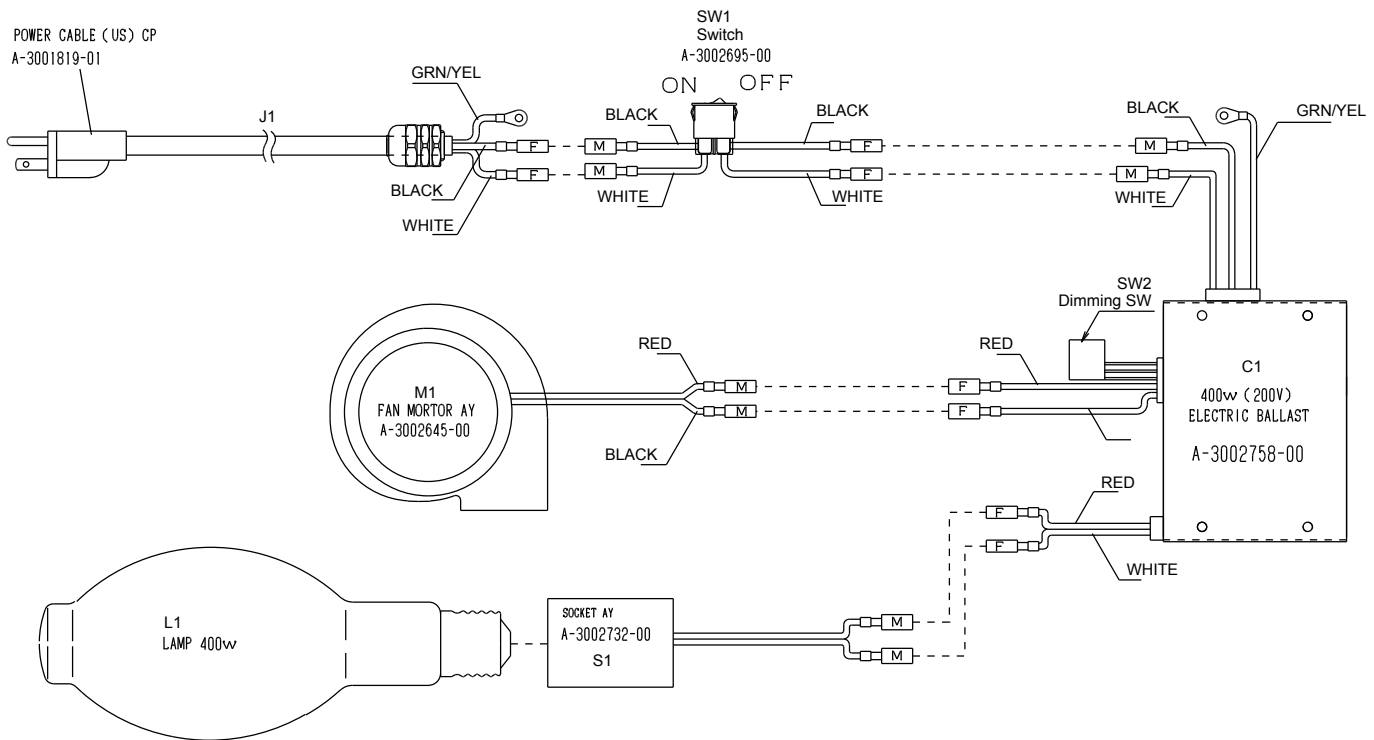


Figure 49. Electrical Wiring Diagram

Table 6. Reference Designations on Electrical Wiring Diagram

Reference Designator	Description	Part Number
J1	Cable CP	A300181901
C1	E-Ballast	A300275800
S1	Socket Assy	A300273200
L1	Lamp, 400 W	E000125500
SW1	ON/OFF Switch	A300269500
SW2	Dimming Switch	N/A (included with C1)

TROUBLESHOOTING

Practically all breakdowns can be prevented by proper handling and maintenance inspections, but in the event of a breakdown, please take a remedial action following the diagnosis based on the Lamp Troubleshooting (Table 7) and Mast Troubleshooting (Table 8) information shown below.

If the problem cannot be remedied, please leave the unit just as it is and consult our company's service department.

TABLE 7. LAMP TROUBLESHOOTING

SYMPTOM	POSSIBLE PROBLEM	SOLUTION
Lamp does not light.	Is plug disconnected?	Plug in correctly.
	Is lamp power switched off?	Turn on switch.
	Is lamp loose?	Screw lamp securely into socket.
	Is power connector disconnected or loose?	Connect disconnected connector.
	Are any other electric appliances (other than light tower) plugged into power source?	Unplug all other appliances.
	Is model of lamp incompatible?	Use genuine MQ lamp.
	Is lamp not cool enough to light again? (Interval of 20 to 30 minutes is required before turning on lamp again)	Wait for lamp to cool down.
Lamp only lights for a short time.	Is ambient temperature too high (more than 104 °F (40 °C))?	Move lamp where there is proper ventilation.
Balloon does not inflate.	Is fan motor (blower) not working properly?	Check or repair fan motor (blower).
	Is balloon envelope defective?	Repair or replace balloon envelope.

TABLE 8. MAST TROUBLESHOOTING

SYMPTOM	POSSIBLE PROBLEM	SOLUTION
Mast cannot be raised.	Is Mast Lock Lever locked?	Release Mast Lock Lever.
The mast cannot be lowered.	Is Mast Lock Lever locked?	Release Mast Lock Lever.

EXPLANATION OF CODE IN REMARKS COLUMN

The following section explains the different symbols and remarks used in the Parts section of this manual. Use the help numbers found on the back page of the manual if there are any questions.

NOTICE

The contents and part numbers listed in the parts section are subject to change **without notice**. Multiquip does not guarantee the availability of the parts listed.

SAMPLE PARTS LIST

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	12345	BOLT.....	1	INCLUDES ITEMS W/%
2%		WASHER, 1/4 IN.....		NOT SOLD SEPARATELY
2%	12347	WASHER, 3/8 IN....	1	MQ-45T ONLY
3	12348	HOSE		A/R ...MAKE LOCALLY
4	12349	BEARING	1	S/N 2345B AND ABOVE

NO. Column

Unique Symbols — All items with same unique symbol

(@, #, +, %, or >) in the number column belong to the same assembly or kit, which is indicated by a note in the “Remarks” column.

Duplicate Item Numbers — Duplicate numbers indicate multiple part numbers, which are in effect for the same general item, such as different size saw blade guards in use or a part that has been updated on newer versions of the same machine.

NOTICE

When ordering a part that has more than one item number listed, check the remarks column for help in determining the proper part to order.

PART NO. Column

Numbers Used — Part numbers can be indicated by a number, a blank entry, or TBD.

TBD (To Be Determined) is generally used to show a part that has not been assigned a formal part number at the time of publication.

A blank entry generally indicates that the item is not sold separately or is not sold by Multiquip. Other entries will be clarified in the “Remarks” Column.

QTY. Column

Numbers Used — Item quantity can be indicated by a number, a blank entry, or A/R.

A/R (As Required) is generally used for hoses or other parts that are sold in bulk and cut to length.

A blank entry generally indicates that the item is not sold separately. Other entries will be clarified in the “Remarks” Column.

REMARKS Column

Some of the most common notes found in the “Remarks” Column are listed below. Other additional notes needed to describe the item can also be shown.

Assembly/Kit — All items on the parts list with the same unique symbol will be included when this item is purchased.

Indicated by:

“INCLUDES ITEMS W/(unique symbol)”

Serial Number Break — Used to list an effective serial number range where a particular part is used.

Indicated by:

“S/N XXXXX AND BELOW”

“S/N XXXX AND ABOVE”

“S/N XXXX TO S/N XXX”

Specific Model Number Use — Indicates that the part is used only with the specific model number or model number variant listed. It can also be used to show a part is NOT used on a specific model or model number variant.

Indicated by:

“XXXXX ONLY”

“NOT USED ON XXXX”

“Make/Obtain Locally” — Indicates that the part can be purchased at any hardware shop or made out of available items. Examples include battery cables, shims, and certain washers and nuts.

“Not Sold Separately” — Indicates that an item cannot be purchased as a separate item and is either part of an assembly/kit that can be purchased, or is not available for sale through Multiquip.

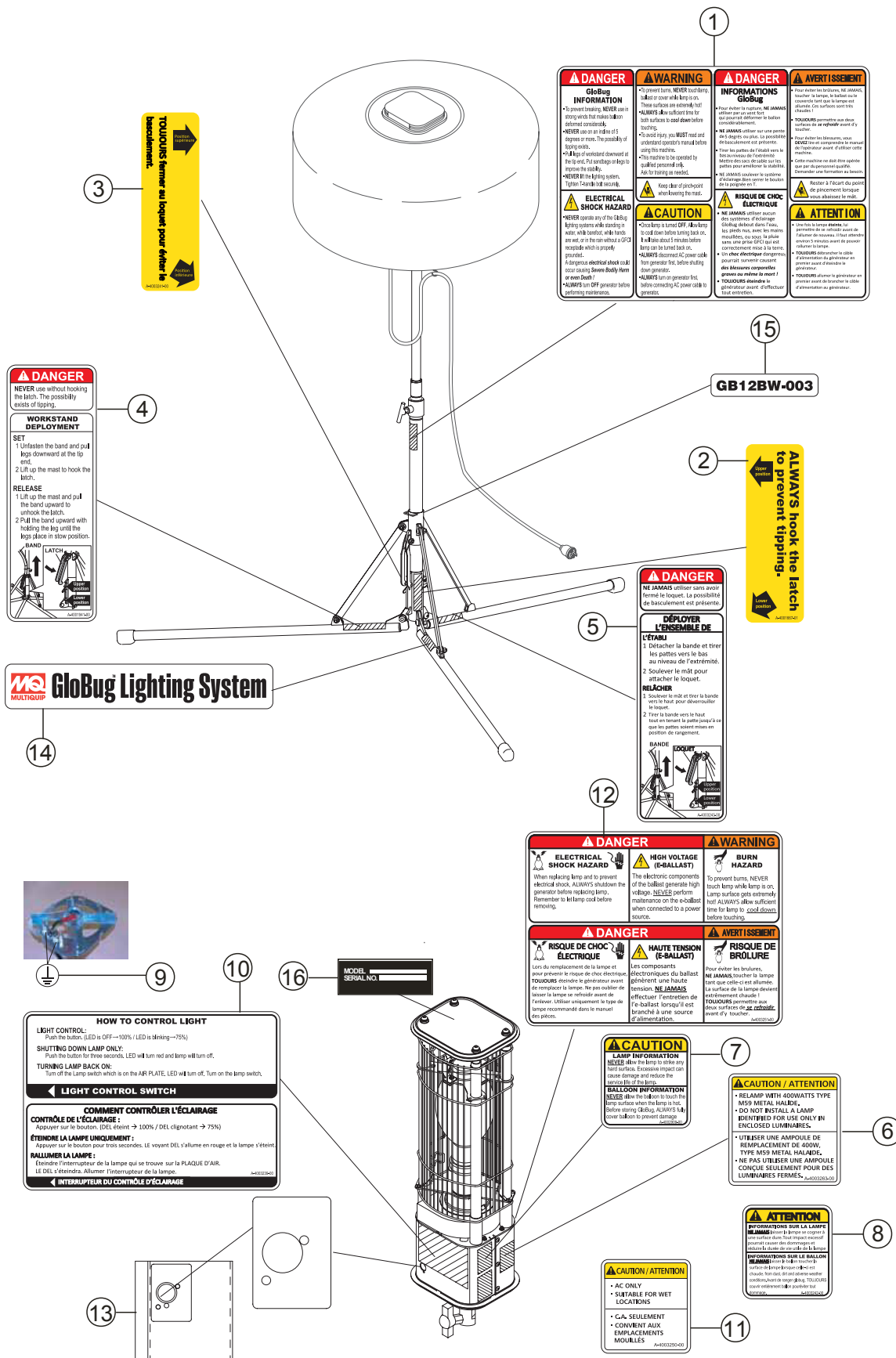
SUGGESTED SPARE PARTS

GLOBUG LIGHTING SYSTEM

1 TO 3 UNITS

Qty.	P/N	Description
2.....	E000125500	LAMP
2.....	A300275800	ELE-BALLAST ASSY
2.....	A100015901	BALLOON CLOTH

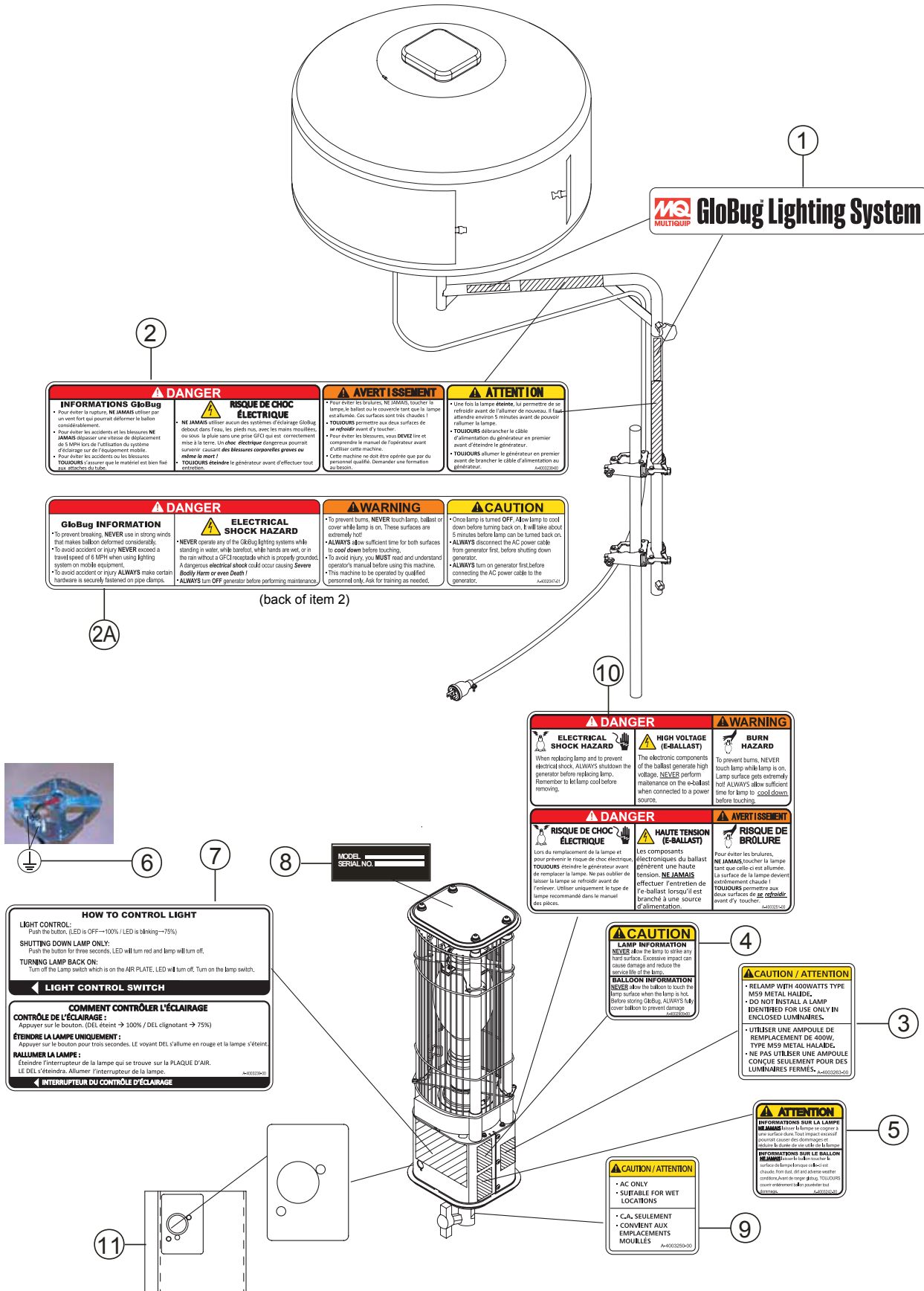
NAMEPLATE AND DECALS (GB12BW)



NAMEPLATE AND DECALS (GB12BW)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	A400324800	DECAL; GLOBUG INFORMATION, ELECTRIC SHOCK	1	
2	A400166701	DECAL; LATCH, RIGHT	1	
3	A400324100	DECAL; LATCH, LEFT	1	
4	A400194100	DECAL; DANGER, WORKSTAND DEPLOYMENT (ENGLISH)	1	
5	A400324300	DECAL; DANGER, WORKSTAND DEPLOYMENT (FRENCH)	1	
6	A400326300	DECAL; CAUTION, LAMP TYPE	1	
7	A400290900	DECAL; CAUTION, LAMP INFORMATION (ENGLISH)	1	
8	A400324200	DECAL; CAUTION, LAMP INFORMATION (FRENCH)	1	
9	A400084300	DECAL; GROUND	2	
10	A400323900	DECAL; LIGHT CONTROL SWITCH	1	
11	A400325000	DECAL; CAUTION, AC ONLY	1	
12	A400325100	DECAL; ELECTRIC SHOCK, HIGH VOLTAGE, BURN HAZ.	1	
13	A400206000	DECAL; DIMMER SWITCH	1	
14	A400193300	DECAL; GLOBUG LIGHTING SYSTEM	1	
15	A400290801	DECAL; GB12BW-003	1	
16		NAMEPLATE.....	1 CONTACT MQ PARTS

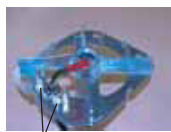
NAMEPLATE AND DECALS (GB12BS)



NAMEPLATE AND DECALS (GB12BS)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	A400193300	DECAL; GLOBUG LIGHTING SYSTEM	1	
2	A400323800	DECAL; GLOBUG INFO, ELECTRIC SHOCK(FRENCH)	1	
2A	A400204701	DECAL; GLOBUG INFO, ELECTRIC SHOCK(ENGLISH)	1	
3	A400326300	DECAL; LAMP TYPE	1	
4	A400290900	DECAL; CAUTION, LAMP INFORMATION (ENGLISH)	1	
5	A400324200	DECAL; CAUTION, LAMP INFORMATION (FRENCH)	1	
6	A400084300	DECAL; GROUND	2	
7	A400323900	DECAL; LIGHT CONTROL SWITCH	1	
8		NAMEPLATE.....	1 CONTACT MQ PARTS DEPT.
9	A400325000	DECAL; CAUTION, AC ONLY	1	
10	A400325100	DECAL; ELECTRIC SHOCK, HIGH VOLTAGE, BURN HAZ.	1	
11	A400206000	DECAL; DIMMER SWITCH	1	

NAMEPLATE AND DECALS (GB12BP)



HOW TO CONTROL LIGHT

LIGHT CONTROL:
Push the button. (LED is OFF→100% / LED is blinking→75%)

SHUTTING DOWN LAMP ONLY:
Push the button for three seconds. LED will turn red and lamp will turn off.

TURNING LAMP BACK ON:
Turn off the Lamp switch which is on the AIR PLATE. LED will turn off. Turn on the lamp switch.

← LIGHT CONTROL SWITCH

COMMENT CONTRÔLER L'ÉCLAIRAGE

CONTRÔLE DE L'ÉCLAIRAGE :
Appuyer sur le bouton. (DEL éteint → 100% / DEL clignotant → 75%)

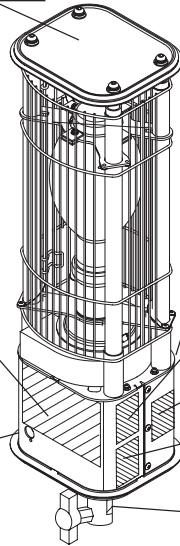
ÉTEINDRE LA LAMPE UNIQUEMENT :
Appuyer sur le bouton pour trois secondes. LE voyant DEL s'allume en rouge et la lampe s'éteint.

RALLUMER LA LAMPE :
Éteindre l'interrupteur de la lampe qui se trouve sur la PLAQUE D'AIR. LE DEL s'éteindra. Allumer l'interrupteur de la lampe.

← INTERRUPTEUR DU CONTRÔLE D'ÉCLAIRAGE

A-400329-01

MODEL
SERIAL NO.



12

⚠ DANGER ELECTRICAL SHOCK HAZARD When replacing lamp and to prevent electrical shock, ALWAYS shutdown the generator before replacing lamp. Remember to let lamp cool before removing.	⚠ HIGH VOLTAGE (E-BALLAST) The electronic components of the ballast generate high voltage. NEVER perform maintenance on the e-ballast when connected to a power source.	⚠ WARNING BURN HAZARD To prevent burns, NEVER touch lamp while lamp is on. Lamp surface gets extremely hot ALWAYS allow sufficient time for lamp to cool down before touching.
⚠ RISQUE DE CHOC ÉLECTRIQUE Lors du remplacement de la lampe et pour prévenir le risque de choc électrique, TOUJOURS éteindre le générateur avant de remplacer la lampe. Ne pas oublier de laisser la lampe se refroidir avant de l'enlever. Utiliser uniquement le type de lampe recommandé dans le manuel des pièces.	⚠ HAUTE TENSION (E-BALLAST) Les composants électroniques du ballast génèrent une haute tension. NE JAMAIS effectuer l'entretien de l'e-ballast lorsqu'il est branché à une source d'alimentation.	⚠ AVERTISSEMENT RISQUE DE BRÛLURE Pour éviter les brûlures, NE JAMAIS toucher la lampe tant que celle-ci est allumée. La surface de la lampe devient extrêmement chaude ! TOUJOURS permettre aux deux surfaces de se refroidir avant d'y toucher. A-400329-01

2

⚠ CAUTION

LAMP INFORMATION
NEVER allow the lamp to strike any hard surface. Excessive impact can cause damage and reduce the service life of the lamp.

BALLOON INFORMATION
NEVER allow the balloon to touch the lamp surface when the lamp is hot. Before storing GlobBug, ALWAYS fully cover balloon to prevent damage. A-400329-01

1

⚠ CAUTION / ATTENTION

- RELAMP WITH 400WATTS TYPE M59 METAL HALIDE.
- DO NOT INSTALL A LAMP IDENTIFIED FOR USE ONLY IN ENCLOSED LUMINAIRES.
- UTILISER UNE AMPOULE DE REMPLACEMENT DE 400W, TYPE M59 METAL HALAIDE.
- NE PAS UTILISER UNE AMPOULE CONÇUE SEULEMENT POUR DES LUMINAIRES FERMES. A-400329-01

3

⚠ ATTENTION

INFORMATIONS SUR LA LAMPE
NE JAMAIS laisser la lampe se cogner à une surface dure. Tout impact excessif pourrait causer des dommages et réduire la durée de vie de la lampe.

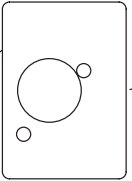
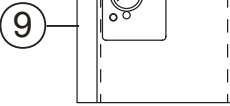
INFORMATIONS SUR LE BALLON
NE JAMAIS laisser le ballon toucher la surface de la lampe lorsque celle-ci est chaude. Avant de ranger GlobBug, TOUJOURS couvrir entièrement le ballon pour éviter les dommages. A-400329-01

11

⚠ CAUTION / ATTENTION

- AC ONLY
- SUITABLE FOR WET LOCATIONS
- C.A. SEULEMENT
- CONVIENT AUX EMPLACEMENTS MOUILLES

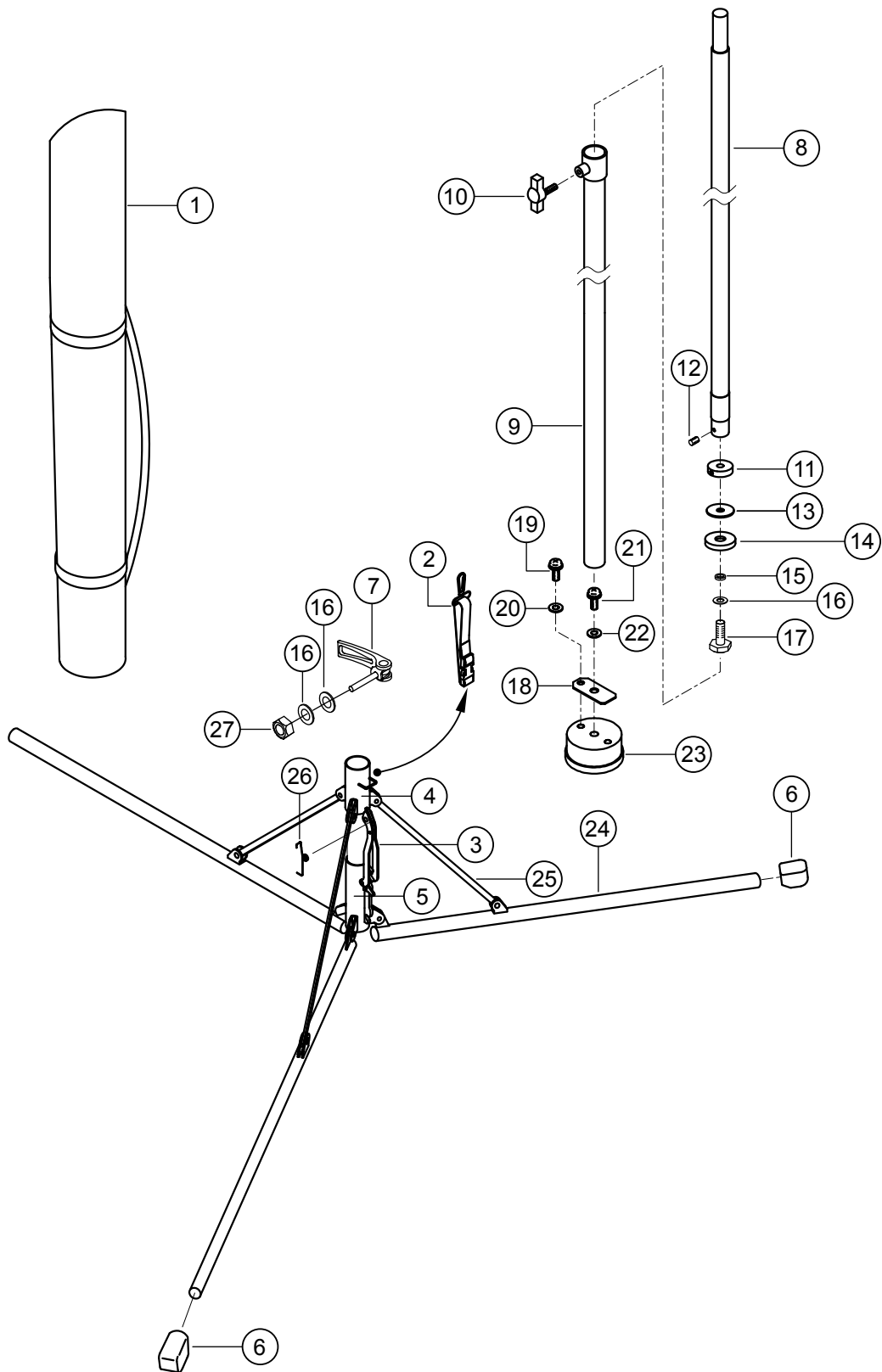
A-400329-01



NAMEPLATE AND DECALS (GB12BP)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	A400326300	DECAL; LAMP TYPE	1	
2	A400290900	DECAL; CAUTION, LAMP INFORMATION (ENGLISH)	1	
3	A400324200	DECAL; CAUTION, LAMP INFORMATION (FRENCH)	1	
4	A400084300	DECAL; GROUND	2	
5	A400323900	DECAL; LIGHT CONTROL SWITCH	1	
6		NAMEPLATE.....	1 CONTACT MQ PARTS DEPT.
7	A400325000	DECAL; CAUTION, AC ONLY	1	
8	A400325100	DECAL; ELECTRIC SHOCK, HIGH VOLTAGE, BURN HAZ.	1	
9	A400206000	DECAL; DIMMER SWITCH	1	

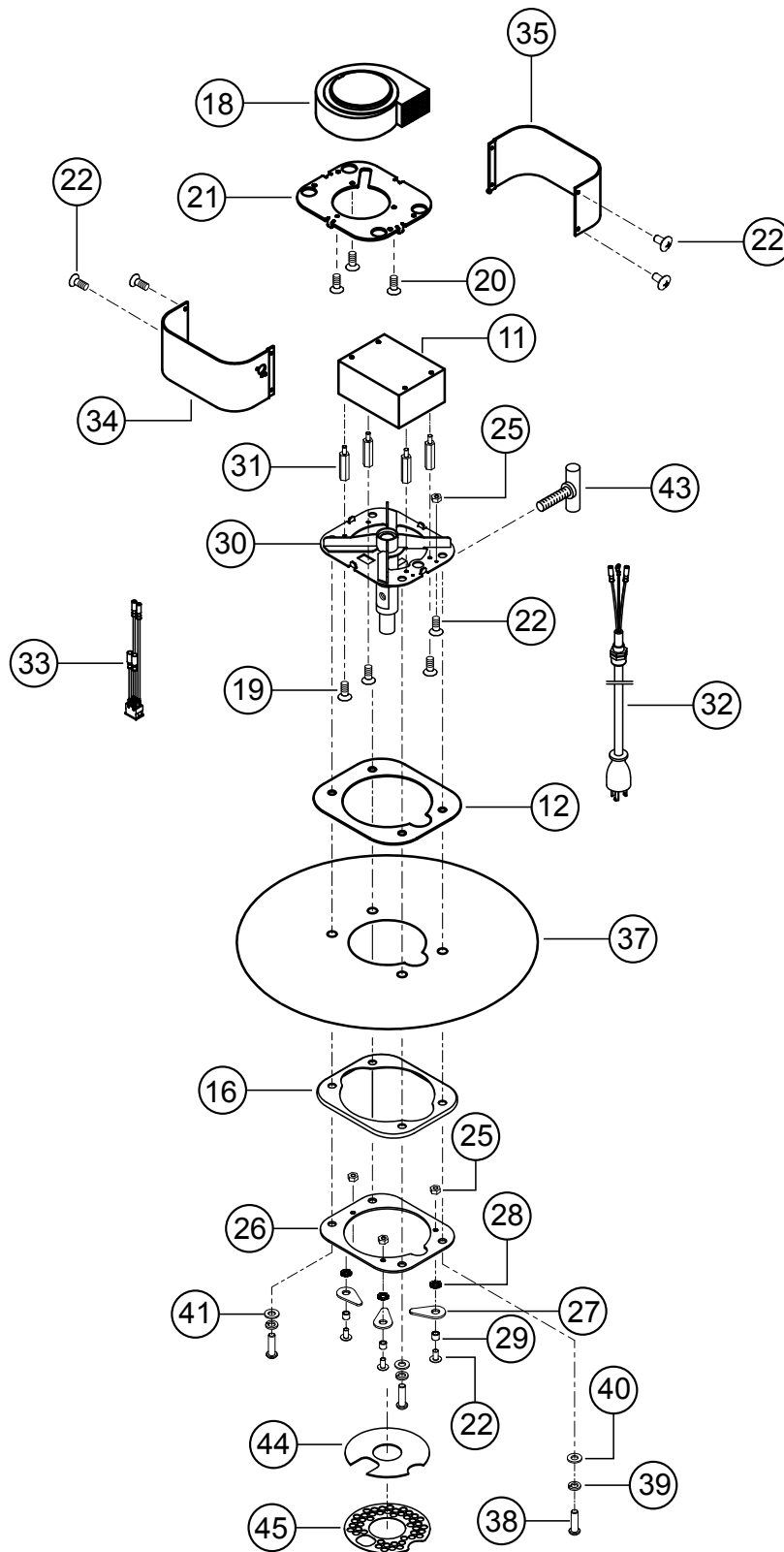
MAST/TRIPOD ASSY.



MAST/TRIPOD ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	A300131500	TRIPOD COVER	1	
2	A300106500	TRIPOD BAND	1	
3	A300108700	SHACKLE CP	1	
4	A300199600	BASE PIPE 2	1	
5	A300199500	BASE PIPE 1	1	
6	1641000330	RUBBER FOOT	3	
7	2212780310	LEVER	1	
8	A300200600	SECOND MAST ASSY	1	
9	A300200300	FIRST MAST ASSY	1	
10	A400187600	KNOB	1	
11	A400229900	BOTTOM PLATE	1	
12	0024705008	SET SCREW, M5x8	2	
13	A400200500	WASHER, SECOND MAST	1	
14	A400200700	RUBBER, MAST	1	
15	A400110200	WASHER, MAST	1	
16	0043108000	WASHER, M8	3	
17	0013108030	BOLT, M8x30	1	
18	A400112700	LEAF VALVE	1	
19	0023104008	SCREW, M4x8	1	
20	0043104000	WASHER, M4	1	
21	0023105008	SCREW, M5x8	1	
22	0043105000	WASHER, M5	1	
23	A400199700	PLUG	1	
24	A300171601	PIPE, BASE	3	
25	A300113103	STAY	3	
26	A400205901	SPRING, SHACKLE	1	
27	0033206000	SELFLOCK NUT, M8	1	

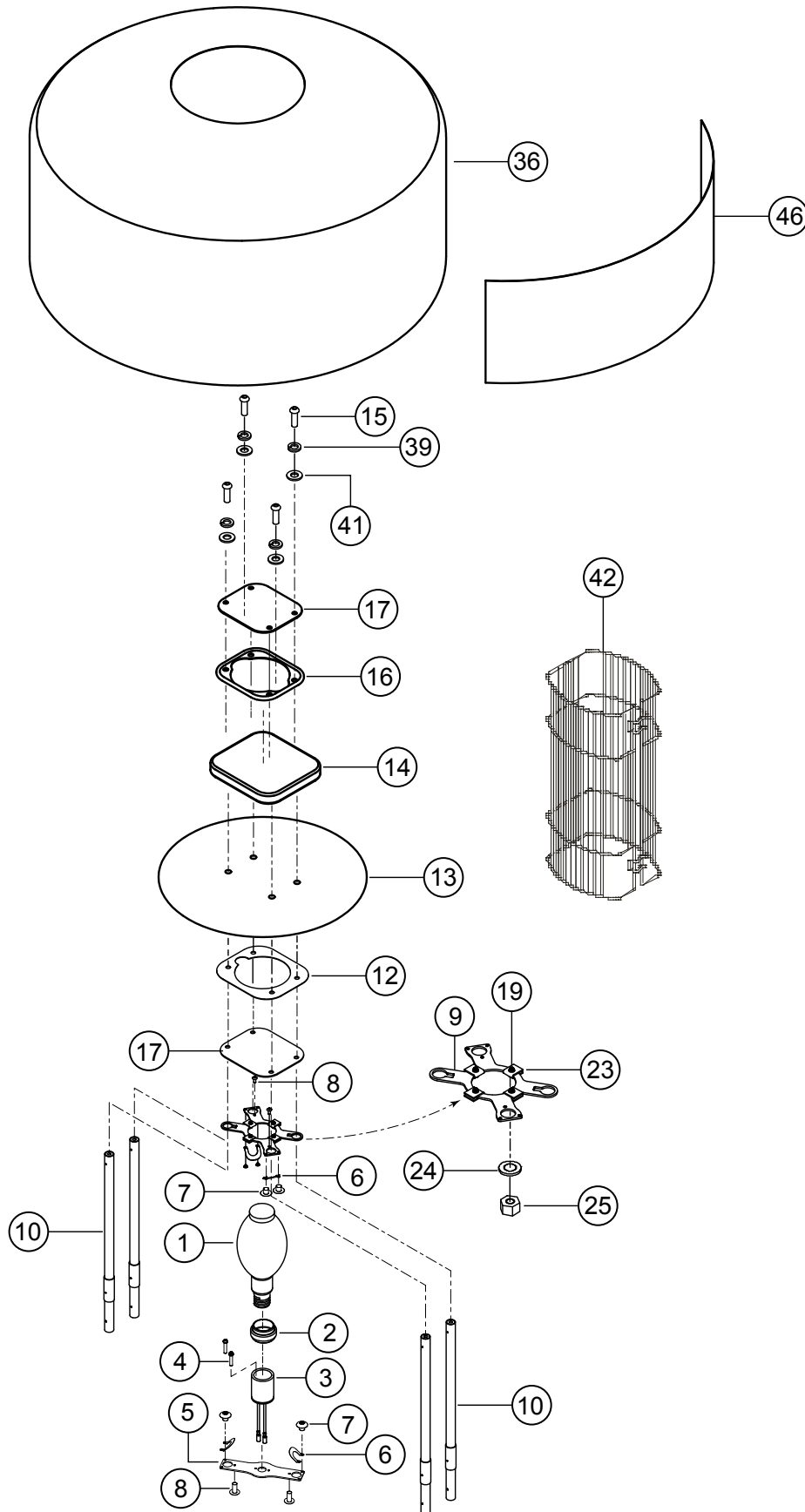
FAN BLOWER/LAMP ASSY.



FAN BLOWER/LAMP ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
11	A300275800	ELE-BALLAST ASSY	1	
12	2214500230	SEAL, FLAT	1	
16	A300162400	SEAL, PACKING	1	
18	A300264500	FAN MOTOR ASSY	1	
19	0023304012	SCREW & WASHER, M4x12	4	
20	0023204006	SCREW, M4x6	3	
21	A300164900	PLATE, FAN	1	
22	0024304008	SCREW, M4x8	9	
25	0033104000	NUT, M4	5	
26	A300145801	PLATE, BOTTOM	1	
27	A400030700	STOPPER, FILTER	3	
28	E000119300	WAVE WASHER, M6	3	
29	E000077500	SPACER	3	
30	A200057603	FLANGE	1	
31	E000114400	SPACER	4	
32	A300181901	POWER CABLE	1	
33	A300269500	SWITCH CP	1	
34	A300180500	VESSEL 1	1	
35	A300180600	VESSEL 2	1	
37	A300148200	SHEET, BOTTOM	1	
38	0014710035	BUTTON SCREW, M10x35	4	
39	0043210000	SPRING WASHER, M10	8	
40	2204510110	WASHER	1	
41	0043110000	WASHER, M10	3	
43	A400209801	KNOB, KSM-50-M10x30	1	
44	A300174401	FILTER	1	
45	A300175300	PLATE, AIR	1	

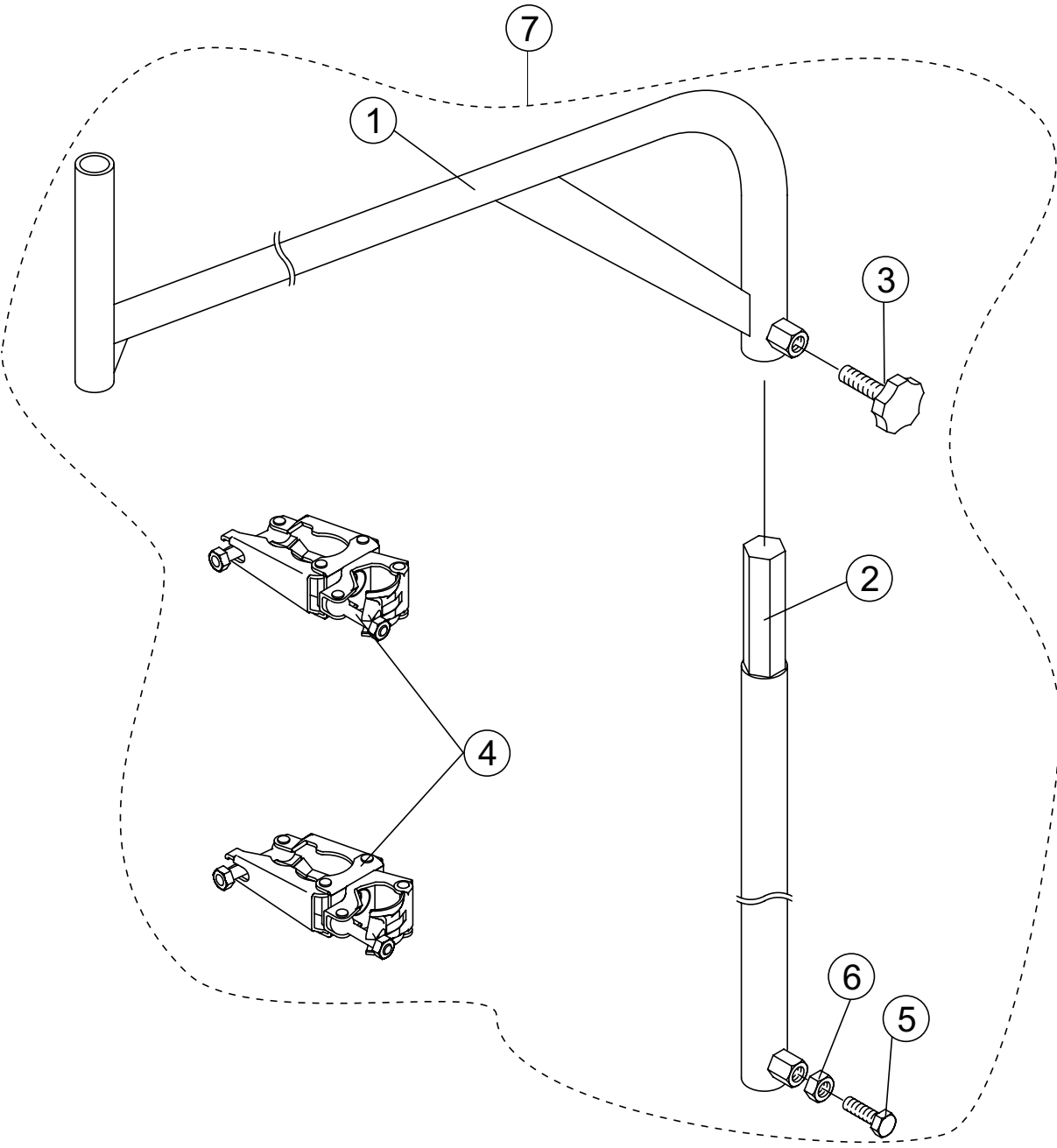
BALLOON/LAMP GUARD ASSY.



BALLOON/LAMP GUARD ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	E000125500	LAMP, MP400	1	
2	E000038200	RUBBER	1	
3	A300273200	SOCKET ASSY	1	
4	0023304015	SCREW AND WASHER, M4x15	2	
5	A300160602	PLATE, LAMP	1	
6	A400195200	STOPPER	4	
7	0024304004	SCREW, M4x4	8	
8	0023405012	SCREW, M5x12	4	
9	A300174000	LAMP HOLDER	1	
10	A300171902	MAIN POLE	4	
12	2214500230	SEAL, FLAT	1	
13	A300160301	SHEET, TOP	1	
14	A100048003	BALLOON COVER	1	
15	0014710025	BUTTON SCREW, M10x25	4	
16	A300162400	SEAL, PACKING	1	
17	A300165100	PLATE, TOP	2	
19	0023304012	SCREW AND WASHER, M4x12	4	
23	A400199500	PACKING, LAMP	4	
24	0043104000	WASHER, M4	4	
25	0033104000	NUT, M4	4	
36	A100015901	BALLOON CLOTH	1	
39	0043210000	SPRING WASHER, M10	8	
41	0043110000	WASHER, M10	4	
42	A100061300	LAMP GUARD	1	
46	A300067700	BLANK MESSAGE STRIP	1	

OFFSET POLE ASSY. (GB12BS)



OFFSET POLE ASSY. (GB12BS)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1#	A200056702	OFFSET POLE	1	
2#	A300166600	POLE	1	
3#	E000077100	KNOB	1	
4#	E000093401	CLAMP	2	
5#	0013112040	BOLT, M12x40	1	
6#	0033112000	NUT, M12	1	
7	A000028100	POLE MOUNT KIT.....	1.....	INCLUDES ITEMS W/ # CONTACT MQ UNIT SALES

TERMS AND CONDITIONS OF SALE — PARTS

PAYMENT TERMS

Terms of payment for parts are net 30 days.

FREIGHT POLICY

All parts orders will be shipped collect or prepaid with the charges added to the invoice. All shipments are F.O.B. point of origin. Multiquip's responsibility ceases when a signed manifest has been obtained from the carrier, and any claim for shortage or damage must be settled between the consignee and the carrier.

MINIMUM ORDER

The minimum charge for orders from Multiquip is \$15.00 net. Customers will be asked for instructions regarding handling of orders not meeting this requirement.

RETURNED GOODS POLICY

Return shipments will be accepted and credit will be allowed, subject to the following provisions:

1. A Returned Material Authorization must be approved by Multiquip prior to shipment.
2. To obtain a Return Material Authorization, a list must be provided to Multiquip Parts Sales that defines item numbers, quantities, and descriptions of the items to be returned.
 - a. The parts numbers and descriptions must match the current parts price list.
 - b. The list must be typed or computer generated.
 - c. The list must state the reason(s) for the return.
 - d. The list must reference the sales order(s) or invoice(s) under which the items were originally purchased.
 - e. The list must include the name and phone number of the person requesting the RMA.
3. A copy of the Return Material Authorization must accompany the return shipment.
4. Freight is at the sender's expense. All parts must be returned freight prepaid to Multiquip's designated receiving point.

5. Parts must be in new and resalable condition, in the original Multiquip package (if any), and with Multiquip part numbers clearly marked.
6. The following items are not returnable:
 - a. Obsolete parts. (If an item is in the price book and shows as being replaced by another item, it is obsolete.)
 - b. Any parts with a limited shelf life (such as gaskets, seals, "O" rings, and other rubber parts) that were purchased more than six months prior to the return date.
 - c. Any line item with an extended dealer net price of less than \$5.00.
 - d. Special order items.
 - e. Electrical components.
 - f. Paint, chemicals, and lubricants.
 - g. Decals and paper products.
 - h. Items purchased in kits.
7. The sender will be notified of any material received that is not acceptable.
8. Such material will be held for five working days from notification, pending instructions. If a reply is not received within five days, the material will be returned to the sender at his expense.
9. Credit on returned parts will be issued at dealer net price at time of the original purchase, less a 15% restocking charge.
10. In cases where an item is accepted, for which the original purchase document can not be determined, the price will be based on the list price that was effective twelve months prior to the RMA date.
11. Credit issued will be applied to future purchases only.

PRICING AND REBATES

Prices are subject to change without prior notice. Price changes are effective on a specific date and all orders received on or after that date will be billed at the revised price. Rebates for price declines and added charges for price increases will not be made for stock on hand at the time of any price change.

Multiquip reserves the right to quote and sell direct to Government agencies, and to Original Equipment Manufacturer accounts who use our products as integral parts of their own products.

SPECIAL EXPEDITING SERVICE

A \$35.00 surcharge will be added to the invoice for special handling including bus shipments, insured parcel post or in cases where Multiquip must personally deliver the parts to the carrier.

LIMITATIONS OF SELLER'S LIABILITY

Multiquip shall not be liable hereunder for damages in excess of the purchase price of the item with respect to which damages are claimed, and in no event shall Multiquip be liable for loss of profit or good will or for any other special, consequential or incidental damages.

LIMITATION OF WARRANTIES

No warranties, express or implied, are made in connection with the sale of parts or trade accessories nor as to any engine not manufactured by Multiquip. Such warranties made in connection with the sale of new, complete units are made exclusively by a statement of warranty packaged with such units, and Multiquip neither assumes nor authorizes any person to assume for it any other obligation or liability whatever in connection with the sale of its products. Apart from such written statement of warranty, there are no warranties, express, implied or statutory, which extend beyond the description of the products on the face hereof.

Effective: February 22, 2006

[illegible]

OPERATION AND PARTS MANUAL

HERE'S HOW TO GET HELP

PLEASE HAVE THE MODEL AND SERIAL
NUMBER ON-HAND WHEN CALLING

UNITED STATES

Multiquip Corporate Office

18910 Wilmington Ave. Tel. (800) 421-1244
Carson, CA 90746 Fax (310) 537-3927
Contact: mq@multiquip.com

Service Department

800-421-1244 Fax: 310-537-4259
310-537-3700

Technical Assistance

800-478-1244 Fax: 310-943-2238

MQ Parts Department

800-427-1244 Fax: 800-672-7877
310-537-3700 Fax: 310-637-3284

Warranty Department

800-421-1244 Fax: 310-943-2249
310-537-3700

MEXICO

MQ Cipsa

Carr. Fed. Mexico-Puebla KM 126.5 Tel: (52) 222-225-9900
Momoxpan, Cholula, Puebla 72760 Mexico Fax: (52) 222-285-0420
Contact: pmastretta@cipsa.com.mx

CANADA

Multiquip

4110 Industriel Boul. Tel: (450) 625-2244
Laval, Quebec, Canada H7L 6V3 Tel: (877) 963-4411
Contact: jmartin@multiquip.com Fax: (450) 625-8664

UNITED KINGDOM

Multiquip (UK) Limited Head Office

Unit 2, Northpoint Industrial Estate, Tel: 0161 339 2223
Globe Lane, Fax: 0161 339 3226
Dukinfield, Cheshire SK16 4UJ
Contact: sales@multiquip.co.uk

© COPYRIGHT 2013, MULTIQUIP INC.

Multiquip Inc, the MQ logo are registered trademarks of Multiquip Inc. and may not be used, reproduced, or altered without written permission. All other trademarks are the property of their respective owners and used with permission.

This manual MUST accompany the equipment at all times. This manual is considered a permanent part of the equipment and should remain with the unit if resold.

The information and specifications included in this publication were in effect at the time of approval for printing. Illustrations, descriptions, references and technical data contained in this manual are for guidance only and may not be considered as binding. Multiquip Inc. reserves the right to discontinue or change specifications, design or the information published in this publication at any time without notice and without incurring any obligations.

Your Local Dealer is:

